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     Ghosh, Malavika
     Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific
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<150> 60/244,717
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<223> a, c, g or t

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<223> a, c, g or t

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<213> Homo sapiens

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<400> 9

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<212> DNA
<213> Homo sapiens

<400> 11

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<213> Homo sapiens

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ttcataggtc aaggataaaa tggaaaaaca gagaaaatgt cacagaaatg tgcccattgt 960
tgaaagacca ccagctgtcc tttttggagg attgttcttt attctaaaaa tgtatatatt 1020
ctattctatt aaaacatttt tgtattggca ttttttttctc ttttatgaaa tgccatgggg 1080
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8

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tagaaatttg taatgtatcc aattctcctg tcttcatgta ttgccctgtg gtggggagg   1140
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tggagcattt aattcttagt acaagactct ctaacattct tctccctctg ttccctgctt   1260
ggtgatactc gaggtattgc aaccccatt aaccttagtc ttagggcaag tttgatggga   1320
aacagagcac cccacacctc cctgcagatg aagcatgagt gagaaaaaca acttctgatg   1380
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<210> 15
<211> 904
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (281)
<223> a, c, g or t

<220>
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<222> (329)
<223> a, c, g or t

<220>
<221> unsure
<222> (469)
<223> a, c, g or t

<220>
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<222> (471)
<223> a, c, g or t

<220>
<221> unsure
<222> (539)..(540)
<223> a, c, g or t

<220>
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<222> (662)
<223> a, c, g or t

<220>
<221> unsure
<222> (692)..(693)
<223> a, c, g or t

9

<220>
<221> unsure
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<223> a, c, g or t

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<222> (776)
<223> a, c, g or t

<220>
<221> unsure
<222> (785)
<223> a, c, g or t

<400> 15
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aggaaaacag taaatcttta atggaacttt ttagcaatta tgacaaaaag aatggaaaaa 180
tgtttaaaca tatataaaag gctagacgtt tatcgccaaa tagtatctaa aggtcataga 240
atagttagga attctgtcat tttgtttttgt gtaataaata nccccttcct ttacccttttc 300
accctaataa tagatatcca ccattttgnt gtgattatcc aactatagag tacctttttc 360
aagaactcat tatataccaa agtaggagct tgctgacact gataatgctt tatttagttt 420
tgtagtgaca tacaattacc atttgcttag gaaaaaaaat aaagaacana nacaagtaaa 480
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tgtcttgtgt gttaagagca ttaaatagtc atacccctta gcctagtgtg tcttctatcc 600
tgaaaaaaaa ttaacaaagc aaatactaac ttaagaaaaa aaactacagc actgaaaaga 660
tntgttgtaa tattgtttat gctaacataa annatgtaaa nnnttatata ttgtttatac 720
tgacttataa tttattacta tacatagtgt aaattatgat acattggctt tggtangcag 780
ttttntaacc gctaataata taaataccat actattaaca atctagaaaa atgattctgg 840
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ctga                                                             904
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<210> 16
<211> 984
<212> DNA
<213> Homo sapiens

<400> 16
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acttgtggtc attgagcctc ctgtgtaaag caccgacgtc attctgtagt tgtcatcact 180
gtattcaggg tgattctaca cgtaggagtg agcatttgac agcttccatg tcttctagtg 240
cggctgagaa tttacatatt aagatacaca ttatttatta tcaattactt tcctgtttca 300
atgtccattt agagcactaa aaatatcttt gtaggtagtt gatattactt atgaatttta 360
tttcaggaga gcaaaggaaa atacaagata gttgtatgaa aaggggggcac cgggtgtgct 420
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tcacatcttg gcttttatac ttacagctgt ataaccgtag acaatctatc taccctctgg 660
ccgactccat ttcctcaatt ataagatagg ataacttgtg aaatgctttc cacaagatta 720
ctattgcatt tattctcctc accactctta atgaagagag tcttgtaaca gataactcta 780
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cttccagtgg gagccatttc attcatgctg ctctactctt tacttggact gctagcaaac 900
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tagtttgccc tcactccatt ccct                                         984


<210> 17
<211> 429
<212> DNA
<213> Homo sapiens

<400> 17
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gcctcctgca tcaacttcct gatggagagt gtatgaatgc aaaagctcct cccttagcac 180
ttacctagtg cttcactctc tgggctcctg ccactgggtc ccagctaaga gagtttgatt 240
ttaaaatcca gagtttatgg ctttttaaaa ataacctctc acctatttat caaaagctcc 300
ttctaaataa tatttacaac aacaacaatg ataatggcta ctatctagta tttcccattt 360
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gccgctcta                                                          429


<210> 18
<211> 734
<212> DNA
<213> Homo sapiens

<400> 18
cttttggacc ataagcctca ggaagctata aggattattt gcattcttac acctgggcac 60
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agaaaataat tttctagaat ttgaagaaaa atcttaaaac atttgaaatt ctttgttatg 180
atgactaata taacgaatag cactcaggtt tatcaaatat taacattttt ccatatttgt 240
tatagaattt ttttccatat ttgctacaga aataatttct ttatatatat aatacatatt 300
tgaacactga ttttacttga tacattaata taatgctgat gtgctgagat gaataaatca 360
aagaacctct tggagctctt ggtgtgcaat aagcatagtt aacgaatata aaataagtga 420
tattttctag aaaataaata ctggtctaca atgccttatc tgtcatttca aagtctctaa 480
aaagatctga aaatccaatg ccttttaaaa ataaaattac ggtaatctca tttggccaca 540
aaacctgttc agaattgatg tgaggctatt aagatattta tttctcttat ttattagtga 600
atattcatct ttcactacag aaatactaac gagtttgatt acagggtgct ttagacttcc 660
ctcaaggtgt acatatttgc tacttttctc taaaatccca aacatcctgg attctgaaac 720
acatctaaac cccc                                                    734
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11

<210> 19
<211> 1184
<212> DNA
<213> Homo sapiens

<400> 19
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agtctgcttt atcattacat taacatttat gaaagacttg ctggtatcat tggcttagcg 180
attattttc catctagatg cttttttaa agaaatgaag agaatatgta atgtttaaa 240
tgtacatttt agtttgattt aaattttaat caaggatttt tattttatac attacatact 300
gatcactgtt ttatgttaac tctggtccta ataaacagaa aataacaatt tggaatatct 360
acaacaatga gagctcgagg taaaatatag cataaataag acatatatgt gtatgaactg 420
agatatatag aaataattaa atgtaacaat cttttggacc ataagcctca ggaagctata 480
aggattattt gcattcttac acctgggcac tcttcctttt tgctgaatac cagttttca 540
atcttttcta tttttgaaat aggtaagaaa agaaataat tttctagaat ttgaagaaaa 600
atcttaaaac atttgaaatt ctttgttatg atgactaata taacgaatag cactcaggtt 660
tatcaaatat taacattttt ccatatttgt tatagaattt ttttccatat ttgctacaga 720
aataatttct ttatatatat aatacatatt tgaacactga ttttacttga tacattaata 780
taatgctgat gtgctgagat gaataaatca aagaacctct tggagctctt ggtgtgcaat 840
aagcatagtt aacgaatata aaataagtga tattttctag aaaataaata ctggtctaca 900
atgccttatc tgtcatttca aagtctctaa aaagatctga aaatccaatg ccttttaaaa 960
ataaaattac ggtaatctca tttggccaca aaacctgttc agaattgatg tgaggctatt 1020
aagatattta tttctcttat ttattagtga atattcatct ttcactacag aaatactaac 1080
gagtttgatt acagggtgct ttagacttcc ctcaaggtgt acatatttgc tacttttctc 1140
taaaatccca aacatcctgg attctgaaac acatctaaac cccc 1184

<210> 20
<211> 550
<212> DNA
<213> Homo sapiens

<400> 20
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cttaaggagc ctgcagcttt gctccaaagc acacactggc agaccttggc cagatgcctg 120
gcacaggggc tggggaggga aaggctgccc aaccccgtt ttcccttgc agatgagcat 180
tctccaaatc catgtttacc cagtcctcct taatgctgcc ttccaaactg tcagcgggtg 240
ctaaaaagca cacattagga tgaattagaa catgccaggc tgcaagggcg ggtgtcatcc 300
cagaactcac agagcacgtt gagggctcag ccgctcagcc acatctttag gtcccaccag 360
catctccccc caggcatgga cctccccaat ttaccctgtg aaggctgcat ggagaagatg 420
caggtcttag gaacagccag catcaccaga ggtgccactt agtgagtacc cagtgggctc 480
ccaacaccgt gctgagctcc cagtgggaga accggaaccg tctgcctgtt ctctgttgta 540
ttccagcatc 550

<210> 21

<211> 599
<212> DNA
<213> Homo sapiens

<400> 21
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ccggccccag tgccttgcat gcagcaaggt cttggcatgt gcaagcttcc ttaaggagcc 120
tgcagctttg ctccaaagca cacactggca gaccttggcc agatgcctgg cacaggggct 180
ggggagggaa aggctgccca accccgtttt tccctttgca gatgagcatt ctccaaatcc 240
atgtttaccc agtcctcctt aatgctgcct tccaaactgt cagcgggtgc taaaaagcac 300
acattaggat gaattagaac atgccaggct gcaagggcgg gtgtcatccc agaactcaca 360
gagcacgttg agggctcagc cgctcagcca catctttagg tcccaccagc atctcccccc 420
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aacagccagc atcaccagag gtgccactta gtgagtaccc agtgggctcc caacaccgtg 540
ctgagctccc agtgggagaa ccggaaccgt ctgcctgttc tctgttgtat tccagcatc 599

<210> 22
<211> 618
<212> DNA
<213> Homo sapiens

<400> 22
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attatcaatt tgtaagtata aaaactgcaa gtatagttgg tagttgataa gaaaggtaga 120
taataaaact taaaagggat ggacacagat tgaaaaaggc cttgagtgcc aagacaagag 180
ctctgaactt taacaggcac tggaaaccgt cataggtctt aggtaggaat atgctgtgct 240
cccaccatct taattaggtc ttatggaggt ttgatagcaa gagggtagga atatcattta 300
gcaggctact gcaagtatcc aggtgaaatg tacagaggtt ttgaactagg ctgctgggga 360
gggtgcagag aagaaatatt ttggaaataa aatggacaga aagtgtataa atggataaag 420
agaggaatag aactgacacc aggcttcaag cctgatgcct gagaataaag gtgtaattat 480
gaagggaatc caggaagaca tggaaagagt ggttggagta aggttaaagt gatagtttta 540
gattgggtta ttttgacgtt gaagtgttga ccaacttctt aagtgaaaat gtgcaacagt 600
cattgaaaat atgagttt   618

<210> 23
<211> 711
<212> DNA
<213> Homo sapiens

<400> 23
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atctcttatt atatatattc taccttttta tgggaaaaac tactcttttt ggtgtaaaga 120
tattttttat attttctttg cttgtaaaga gttattatca atttgtaagt ataaaaactg 180
caagtatagt tggtagttga taagaaaggt agataataaa acttaaaagg gatggacaca 240
gattgaaaaa ggccttgagt gccaagacaa gagctctgaa ctttaacagg cactggaaac 300
cgtcataggt cttaggtagg aatatgctgt gctcccacca tcttaattag gtcttatgga 360

13

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ggtttgatag caagagggta ggaatatcat ttagcaggct actgcaagta tccaggtgaa 420
atgtacagag gttttgaact aggctgctgg ggagggtgca gagaagaaat attttggaaa 480
taaaatggac agaaagtgta taaatggata aagagaggaa tagaactgac accaggcttc 540
aagcctgatg cctgagaata aaggtgtaat tatgaaggga atccaggaag acatggaaag 600
agtggttgga gtaaggttaa agtgatagtt ttagattggg ttattttgac gttgaagtgt 660
tgaccaactt cttaagtgaa aatgtgcaac agtcattgaa aatatgagtt t        711


<210> 24
<211> 547
<212> DNA
<213> Homo sapiens

<400> 24
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gaattgatta ttcatgaaga cacaatgtaa catcaagttt gggttaatgt tcctcagtgc 120
aacaacaaag acgtatttgt aatcactccc atgagtctac tttgcagcaa gaacatgcat 180
tttggaatta ttcccatcct gtgtgctgaa tactggatgt gactcttagt cagctctgtg 240
acccttgtca agtaacttaa gctctttgat catcagcttt gtcatctgta aaatgggcat 300
tctgcctact tcaaagagaa gttgaaggga ttaaacgaga taacctacaa agagcaccca 360
gcacaatggc ctaaaaaagg aaggcactga atcattctca ctcccctacc ttcagtctga 420
tcctgctctt attgtcaaaa ggataatttc aattttaata gatctgagat cctgtttttt 480
aataataatt ttatagaatt tttcatttta tggcaggcac agggctcatg cctgtaatcc 540
cagcact                                                         547


<210> 25
<211> 549
<212> DNA
<213> Homo sapiens

<400> 25
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taggaagaac ggaggcacct gagttcacca ggtgggacga acctggcctt agcacggaat 180
gtggcattta ggtgcttaag tttgttgttt tttttaaatt aaagtggttg acctggagag 240
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ttcttaaata tcataatgag gcttgtggat tttattctgt ggtttggatg ctctcttctt 360
ccatcccttg gatgccaaca ggcatgcact gtttaatctt ggaattcaaa cggtggcctc 420
aaacagtgag gctgagtatg tggcctcatt agcttcagac ccagcagggc tgggctcaca 480
ggcgtgtcat ttatcaaggg cttgaatctc tgccagctaa tttatctaag acaactctat 540
gagatgggg                                                        549


<210> 26
<211> 350
<212> DNA
<213> Homo sapiens
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14

<400> 26
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gatggcttac gtgcagggta atgtatgaac cttcccaagc tctgtacaaa tataacttgt 180
cattcgtaga gacgtatgta tttatatgtg tgcatgcagt cttatttgta gattttcttc 240
ccatttgctt aatactgaac gctatggcct agatgtgaaa tttaccaggt actactcata 300
gcaggcagtg aaaccgtgga ctcagctgct ctttccttct ttcctcccca 350

<210> 27
<211> 627
<212> DNA
<213> Homo sapiens

<400> 27
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aaaaggataa gaaagaggat acagagttta atcagagttg gcatcagata gagtaaccat 120
ggacatttgg aagctgtaac ctctctcata tttcgccaag ataactgct tcctgtatta 180
tcatgtaatg agttttatgc gtgatggaaa atgtaaaagt aatcttaacc caaacctgca 240
ttttaatgcc acatggaccg gctgtaattt atggcatctt taagatagat gggtacacat 300
attatgaata tactttcctt ttgccagacc ttgacattct gtagactttt aatggaatat 360
tatttgcctc tttcatctta ccttgacgta tgaggtggat ggcttacgtg cagggtaatg 420
tatgaacctt cccaagctct gtacaaatat aacttgtcat cgtagagac gtatgtattt 480
atatgtgtgc atgcagtctt atttgtagat tttcttccca tttgcttaat actgaacgct 540
atggcctaga tgtgaaattt accaggtact actcatagca ggcagtgaaa ccgtggactc 600
agctgctctt ccttctttc ctcccca 627

<210> 28
<211> 548
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (132)..(348)
<223> a, c, g or t

<400> 28
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tcttgctgga gtnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntc ctcctgttaa 360
atgttgatag aaaaatggtt tgatggcagc atatatccag attgtagatt tcataatatt 420
aaagggagt gggcaaataa taaaatgcaa gaaatgaaag catttgaaaa tttagaggac 480

15

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agaaatgact tttaagtaag tgattttagg tgtactggaa tgagtaatct agaatatttg 540
atatgaga                                                           548


<210> 29
<211> 988
<212> DNA
<213> Homo sapiens

<400> 29
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ttcaaggaaa accaagcagc tcttgactca acaaataaaa atgtaagtct gtctgaagaa 180
ttagtgaacc agggcaccca gtcagctttc tcctaaaata aatttggaga gctgaaagat 240
atggatgagg tcagatttct aaaaaatcag tatacacaca gtgtttttaag aataaaaaac 300
agattgatta aagggaaaaa taatttgtaa ataacagaag ccataactta gagataaaaa 360
taactgtcct ctgattaaca gaactttag aatgatgaga aaaattaata acacagttaa 420
agatatcaca gtgattttta aaaatatttc aaggttgaag aaaaaatatt cctatgagaa 480
tacaggctga aaaagatcaa agtaaaatga atcaggtcgg tatcagaaat ttcagtgata 540
tacaatgaag gaataaaatg gagcagcagc tatagttttg aaacaaatg tattttccaa 600
ggttcttgta cccaaccaaa ttataactta tgtgttagga caatagagaa gtaattttag 660
ccaaagaaat aatctgaaat tatagcatct atgcacattt attgaaacaa gaaactcaga 720
aatcaaaata gccgagaaat taataaaata ttcaaaagga ggaaaataca ttttagaata 780
aagcataatg aggaataaaa tcactatgac ttttgaaag tataaaaatt gttatttttt 840
tctatgaata cttgctcaaa tttaaagtag tggatttaat gttgtagcgc taagtattca 900
gccaagaggt agaactaata aataaaaatg atagttcttt taaaaaaaca taaaaataat 960
tatctcatga gtagcctaag aaaaaaagc                                    988


<210> 30
<211> 651
<212> DNA
<213> Homo sapiens

<400> 30
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aaaaagtcca acacatttgg ggctggacac accagtcaaa tggttgaaat tagaagatgg 180
ggaaaaaata tgtcaggtaa atactttatt tcattggatt tatgacttcc cctgtaagaa 240
gcattattat tttatataaa tacccaaaaa aaaaaaacaa caaggcagc taaattctga 300
aattaattgc atatgcatca tgatttcaga tatattaaac tgtgaaaaaa gtgcgttaaa 360
atggtaaagc acaataatca aaataaagtt tgtatagcaa tattaatatc acataaaata 420
taaattagaa caaaaaagca cttataggga taaagagaaa caccagagaa aacaaagaa 480
aaaatcctaa gaaaatataa ccttcacata cttatatggt ttaacagcaa agcccgtgaa 540
ctgtttaata taggaagcac aaacgtgact gaagttacaa gagactgaga caactttcaa 600
aactcatggg gggagaattt tatcacttca acagaaactt aacaatttaa c            651
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16

<210> 31
<211> 553
<212> DNA
<213> Homo sapiens

<400> 31
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aaggttttat tagattctac atctcatgat tgatccaaaa gacgttttaa aaacaaaaca 180
aaaaaaggcc ttgtaggtct taactcttac ttagcctcac atttatttga tagtttgagt 240
gagtatctta aaaattgaag atgattataa aaatttaat gtagacatta ttttttctca 300
gaattttgaa ggcactgctc tgtcttttgc agttggagag tctgatgcca ttctgattct 360
taaatctttt atacaaaaca tgttttttgct tttggcagga agctttacct tttctttctt 420
tcaagtgtcc tgaaacttca ctgagatgta tcatggtata ggtccacttt gatccactgt 480
cctggacact tgctaggcct tttcagtctc gaagctcatg actttcaggt aagagaaatt 540
tacgtctaag acc   553

<210> 32
<211> 2159
<212> DNA
<213> Homo sapiens

<400> 32
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tttggaggtt acagataatg ctactataaa catccatgtg caggtttttg tgtgaatgta 180
aagtttccaa ttcatttgag taaataccaa agcatgcaat tgctacatca tataaaagta 240
tgtttggtac tataagaaac tgccaaactg tcctcttaag tggctatgca tattttcact 300
tccaccagca ataaatggag ttcctgttgc tccacatgct cactagcatt tggtgttgtc 360
agtgttctgg attttggtca ttctaataag tacatagtca tatctcgttg ttttaatta 420
caattcccta atgacatatg atgttgaaca tcttctcata tgcttatttg ccatctgtat 480
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gcctgctggg ttcaagcaat tcttctgcct cagcctccca agtagctggg attacaggca 660
cccaccacca cgcccaggta attttatatt ttttcataga gatggggttt cgccatattg 720
gccaggctgg tctcaaactc ctgacctcag gtgatccacc tgcctcagcc tccgaaagtg 780
ctgggattac aggcgtgaga caccacaccc ggctcttgtg cacgtaattc tattttattt 840
gagatggagt cttgctctgt tgcccaggct ggagtgcagt ggcatgatct cggctcaccg 900
caacctccgc ctctcaggct caagagattc ttgtgcctca gccttccagg tagctgggac 960
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agactcacta aggaaataga ggcaccagca ctctctgtaa tttttagtaa aagactccta 1380
tctgagggaa tctgggattc cccccaaaag gatctcagtt tgatcaccct acagtgaagg 1440

17

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gtttgagcag agtcacatat taccagagaa ttcgaggata gtatctccga gaagccggga 1560
aaaaactcag ttaagagaga agggatgctt taaaaaaaaa aaaagaggtc ttagacgtaa 1620
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gttttgtttt taaaacgtct tttggatcaa tcatgagatg tagaatctaa taaaaccttt 2040
ttatgattta tctcccataa accatttttt caggaaagta gataaatatgc tccacaaaat 2100
aaagtacatc aaggaaaaaa ggcatcttag tctttgatgg aagaaagagg aagtccagt 2159


<210> 33
<211> 450
<212> DNA
<213> Homo sapiens


<400> 33
agaaaacaag atccagatac aaaaatcgat tgtattttaa ctatgctaat aattagcaga 60
tattgaaact ttttaaacat acaatttatt atagcatcag aaaaatggaa tgcttaagta 120
taaatctgac aaaaaatgtg agctacctgt acactggacc actaaacact agtgaaacaa 180
aattgaagag ctacttaatt ggaaatcagt ttcccccccag atttatctat agagtcagtg 240
aaatcccaat caaaatctca gcaaggtctt taagaaattg acaatcttat tttaaaattt 300
aagtggagat gcgaaataac taaagcaatt ctctgacaaa aacaagaaaa aagctagaag 360
gctaacaacc acactgattg caagatttat cagaacaggt ataataatca ggccagtgtc 420
atatcggcat acacgataga ccaggagatc                                  450


<210> 34
<211> 584
<212> DNA
<213> Homo sapiens


<400> 34
ctagacttat ggatttgagg gagctgtgtg aaactcatca tggcaaatat gcttatgtgt 60
atatatcctt tgccatacat gtgctgcaaa ctgtaatgaa atgttatttta taagactggt 120
aaggcatgtg ttattagact ggacacacaa aagcccttga ttatctagga agcaatcctc 180
tagggtccag atgtagtttg gaatgtgggt gtttagtatc actgtacttc attactgatt 240
tttatttcta tgctgtttga ctgtattagc tctttgttat tattggggag gtagccagag 300
gtctccagat tcccataatg aatttacagg tgtgatctta tggacaagga ggagtcagct 360
gtattagttg ggggttcaat cttgcctgat aagcttttcc tagttggttt tacagatacg 420
agccctgatc tactccctgc tgccactgtc tgtttctatg atgcatgtca ccatgatatc 480
tgagtatgta tgaaaatata tttaggctaa ttttaactag aatatggaaa ggaaaaagtt 540
ctattgctct gcattgctct gttttcagca atcactgttt ttca                 584
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18

<210> 35
<211> 642
<212> DNA
<213> Homo sapiens

<400> 35
gctagactta tggatttgag ggagctgtgt gaaactcatc atggcaaata tgcttatgtg 60
tatatatcct ttgccataca tgtgctgcaa actgtaatga aatgttattt ataagactgg 120
taaggcatgt gttattagac tggacacaca aaagcccttg attatctagg aagcaatcct 180
ctagggtcca gatgtagttt ggaatgtggg tgtttagtat cactgtactt cattactgat 240
ttttatttct atgctgtttg actgtattag ctctttgtta ttattgggga ggtagccaga 300
ggtctccaga ttcccataat gaatttacag gtgtgatctt atggacaagg aggagtcagc 360
tgtattagtt gggggttcaa tcttgcctga taagcttttc ctagttggtt ttacagatac 420
gagccctgat ctactccctg ctgccactgt ctgtttctat gatgcatgtc accatgatat 480
ctgagtatgt atgaaaatat atttaggcta attttaacta gaatatggaa aggaaaaagt 540
tctattgctc tgcatttgct ctgttttttca gcaatcactg tttttttcaccc acatatagaa 600
agtttgaaag ctctctctga tgtctggcaa ccagatctcc ca   642

<210> 36
<211> 669
<212> DNA
<213> Homo sapiens

<400> 36
ccaaaattta ctagaatgtc ctgaaccaca tctttcataa tgttgctgac tcaaagactc 60
ttgaaggctc ctgaccacat tattcgcaat tctaactctc ttgccacccc ttccccatga 120
cccatgtaca attacatgct ctagatcttc tcctcaaaga tgaacataag tctgaaatat 180
caacaccttg gcagccctat tatcaattgc tgatctgtag tccccatgta agtacgcctt 240
ttttagcaac cagttttttgt cccagccata ttaatacttg tggtcagtgg ttaacaatgt 300
tgaagcttaa attatatcca gatgaaattt taaaaaggaa tcacttgtgt tcctctgtgt 360
taacacagga atcccagcat gtgtttctct tccaggaaac cataattata tgtacaaata 420
tctacccgga caattagggg cataatcatg ctctaaatag aagtgttcaa acaagtcaac 480
accttctctc cagttattcc tctttcttct ttctcttaga tgtcatggtt tctgtgtctc 540
aagacattta tgatttgatt tttctaaccc tttctaggtt ctattagagt caattagaca 600
acatattcct tctttctaag aatctggaca aggaggtata cttttctaaa ttttaatcct 660
attaatgcc   669

<210> 37
<211> 1006
<212> DNA
<213> Homo sapiens

<400> 37
tcttaaaatg agcaccctca ggactgttag gtaggagagg tgttagattt caagtagata 60
caaataggtc cagaaggtaa aatgaggacc caaggataga agagcgacag tgatttcagc 120
tgagcctcag ttccaagcac agaacttttc agaaacagaa tgggttgcat aatatgtccc 180

19

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cttttaaaag acactttgca gacctggatg cctgtgtgtt ggcatggagc atagaggttt 240
cctgtcctgg gtaaacatgc tgtgctggac taggttctct ctgaaagtct ctccctgctt 300
caggagtcta gaattctaag tttcttctca ggagactcca aaatttacta gaatgtcctg 360
aaccacatct ttcataatgt tgctgactca aagactcttg aaggctcctg accacattat 420
tcgcaattct aactctcttg ccaccccttc cccatgaccc atgtacaatt acatgctcta 480
gatcttctcc tcaaagatga acataagtct gaaatatcaa caccttggca gccctattat 540
caattgctga tctgtagtcc ccatgtaagt acgccttttt tagcaaccag tttttgtccc 600
agccatatta atacttgtgg tcagtggtta acaatgttga agcttaaatt atatccagat 660
gaaattttaa aaaggaatca cttgtgttcc tctgtgttaa cacaggaatc ccagcatgtg 720
tttctcttcc aggaaaccat aattatatgt acaaatatct acccggacaa ttaggggcat 780
aatcatgctc taaatagaag tgttcaaaca agtcaacacc ttctctccag ttattcctct 840
ttcttctttc tcttagatgt catggtttct gtgtctcaag acatttatga tttgattttt 900
ctaacccttt ctaggttcta ttagagtcaa ttagacaaca tattccttct ttctaagaat 960
ctggacaagg aggtatactt ttctaaattt taatcctatt aatgcc          1006


<210> 38
<211> 589
<212> DNA
<213> Homo sapiens

<400> 38
aggagctggg ttttgcttaa cagaaggagc actgacccat gttatagaca atcgcagaat 60
ttcatatccc catctataaa atgaaaacac aatacttctc accaacactt atacagcacc 120
tactatgtgc taggttagag atcataaact ggtgatatgt aagtggaata taaccctcag 180
acttggtctg tgtgttctac gcagttgatc tgcaccagcc tttgttaaaa ttggaaggaa 240
attgctaata tttaaaatca ggatatttcc cacgaaaatc tacatttcta gtatctcaga 300
aaaatcatta tttggcagca ctgggccaga atttctgcag ggcaattgtt gtcctgactt 360
gggtggctgg tggaaatggg cgtgtactcc taagtttgtc ccaattgcta ccgctctatt 420
acttcatcct ttaatgttca ctactcttgg ccctgtggga ttttttgaggc tgagattcct 480
atattaggtt ctgaaggcaa aacacacaca gaaaagaatg atttcaggcc cttcctgagc 540
atactcatga tgtataactt ttatgacagt aatagtagta tctagcaat          589


<210> 39
<211> 528
<212> DNA
<213> Homo sapiens

<400> 39
aagacctgtc tttatttta gaagtaagaa taaaagagat tgtggtggag tatcacaggc 60
agcgtgggag cactgaggga gccctgacc caccctagga gtggatcagg atgacttctg 120
aaaggccaaa ctgattaata agggataaat aaagtcatgc aaatgaaaag gttgtatatg 180
tgttggggga aagcattcca gacagaagga ccagtgtgtg caaaggccct ggggtgagag 240
gtgcctaatc agtactgaat atacaaagag gtagagctgg gactaaacca ctgtgctcac 300
tttgcctgct tgaattccga ttccaaggag tggaatagac ttcaaatgtc ttcaagtcca 360
cttgtttctg ccaagttctc atttttgttc catgaaggca gagcaccttc tttatttcat 420
ccactgatga cttctcagcc tctagaattc tgccttatga tggatttctc agaaatatgt 480
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20

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ttgtgtaatg aagacaagga cagtggttag agtttacatt ctactggg                528


<210> 40
<211> 673
<212> DNA
<213> Homo sapiens


<400> 40
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ctgaggtggg aggattgctt gagtcccgga gttggatgct gcagtgagct atgattgtgc 120
cactgcagcc tgggtgacag aacaagaccc tgtctttaaa aacaagaagt aagaataaaa 180
gagattgtgg tggagtatca caggcagcgt gggagcactg agggagcccc tgacccaccc 240
taggagtgga tcaggatgac ttctgaaagg ccaaactgat taataaggga taaataaagt 300
catgcaaatg aaaaggttgt atatgtgttg ggggaaagca ttccagacag aaggaccagt 360
gtgtgcaaag gccctggggt gagaggtgcc taatcagtac tgaatataca aagaggtaga 420
gctgggacta aaccactgtg ctcactttgc ctgcttgaat tccgattcca aggagtggaa 480
tagacttcaa atgtcttcaa gtccacttgt ttctgccaag ttctcatttt tgttccatga 540
aggcagagca ccttctttat ttcatccact gatgacttct cagcctctag aattctgcct 600
tatgatggat ttctcagaaa tatgtttgtg taatgaagac aaggacagtg gttagagttt 660
acattctact ggg                                                    673


<210> 41
<211> 447
<212> DNA
<213> Homo sapiens


<400> 41
ctcaagcagg gctagcacct ccaatctaga gcaccctgca cttccggctc caccggtctt 60
cttgtccctt cactgccttg cctaggggtg ccttctcctc ctctcttaag ctgagtacaa 120
gtgataatat agtgattaac acaatgctgt agtgttttcc tgttaaacag ggaatggttg 180
attttccagg agaatagaaa atgaaattgt cattggagga cctcctcagt tgaaatcatt 240
ctgtggctga tttcctccta ttttgttttt tgttggttgg ttggtttttg cttttttcagt 300
agctacccag gtatacaaat agcttctttg cagttctgat catctttagg ggccgcattg 360
ggcataattg gaataataat actagctaac ctgcttgcag ggcttgctct gtgctgtgca 420
ctttgtgagc actttaaata taggagc                                     447


<210> 42
<211> 562
<212> DNA
<213> Homo sapiens


<400> 42
ctcaagcagg gctagcacct ccaatctaga gcaccctgca cttccggctc caccggtctt 60
cttgtccctt cactgccttg cctaggggtg ccttctcctc ctctcttaag ctgagtacaa 120
gtgataatat agtgattaac acaatgctgt agtgttttcc tgttaaacag ggaatggttg 180
```

```
attttccagg agaatagaaa atgaaattgt cattggagga cctcctcagt tgaaatcatt 240
ctgtggctga tttcctccta ttttgttttt tgttggttgg ttggttttttg ctttttcagt 300
agctacccag gtatacaaat agcttctttg cagttctgat catctttagg ggccgcattg 360
ggcataattg gaataataat actagctaac ctgcttgcag ggcttgctct gtgctgtgca 420
ctttgtgagc actttaaata taggagccaa acctctcttt ccaaaagcct gaagggcagg 480
tgtcctcgca gttcccattc catagatcac catccttcca tggaaagtac tctgtggact 540
gtaacttgcc atctagactt tt                                          562
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<400> 43
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gcatcatcgg gggccttctg ctccatgtgt accctccagt atttgcaaaa gattgaacct 120
acaagatacg ttattagggc aagtatttac atggaaaggc tctgagttct ccaagacttt 180
ggtcattttt tacaagatga tgtactaccc tgatgatttg tggaatcttc ttaggaaccg 240
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acattgtcca ggaattcatc cctgccatga ctgcagtgcc ccctctggga gctccccgtg 660
ccctgtgcct gccgctgtca gagcttccag catgctgggc tgtggaggtg ttggtctgtt 720
tgcccaccca gcaagcctct aagctcctca aagacaccaa ctgtcacgca tatctggagc 780
agcacctggt accttacggg tccttaaatg ccggctgaat gaatgatgtc ttctgtctct 840
ttaaaccc                                                          848
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<400> 44
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gcatcatcgg gggccttctg ctccatgtgt accctccagt atttgcaaaa gattgaacct 120
acaagatacg ttattagggc aagtatttac atggaaaggc tctgagttct ccaagacttt 180
ggtcattttt tacaagatga tgtactaccc tgatgatttg tggaatcttc ttaggaaccg 240
tgactgtgtt gcttttctga tcatgggtac agggccatct ttgttgaggc ttcccatgtg 300
tgtgggcaca gagcttctgt ggcattccag cagtagatta atggagctgt catcctctga 360
agcctcatgg gttgtgcatg caaacctggt cctgtgaact gcatgggagt ctcttaaaag 420
ggcagaggga ttccttcctt tgtgaaaggt ttagaatggc acatatttgt aatttccaga 480
ctcatctttt cccactctca cattcactct gtatttggcc gtactaaatt gttgacagtt 540
ctccaaatac aacagcattg ctattctgct gccttcgtac atgccgttta cattactgtc 600
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22

```
acattgtcca ggaattcatc cctgccatga ctgcagtgcc ccctctggga gctccccgtg 660
ccctgtgcct gccgctgtca gagcttccag catgctgggc tgtggaggtg ttggtctgtt 720
tgcccaccca gcaagcctct aagctcctca aagacaccaa ctgtcacgca tatctggagc 780
agcacctggt accttacggg tccttaaatg ccggctgaat gaatgatgtc ttctgtctct 840
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acagttactg acaccaattc ctgtggaaaa taataaaaga ctcgcggctt tcacatcacg 1080
tagcttaaaa agggaacacg gggacaaact g                               1111


<210> 45
<211> 626
<212> DNA
<213> Homo sapiens

<400> 45
tgttctgaca tcaacaggaa aaatggtaca agaatatttt cagatcatgc caaaaagcag 60
cacttcgtta aaaggaagaa aaaatttcaa gtaaaacata aacaggtttt tagattgctc 120
gataattcaa ttagtgaatc aaacaatgat aaaagctata tatttcctgc tgatttgtca 180
ggaaatagtg acactgacaa agatagcatt acctaagaat ataaaagcaa agatagcgtt 240
gccacagact gcttaatgtg tgtcatctat caaaggggta tatgtgatga gaagaaaaac 300
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cgcataattg tgagcaatat tctaaagatc gacgtttctt cagttatgat tttcttgagg 420
ctacatcaga gaacttcctt aaacctgtcg gtaatacaaa atcagtgagt catggcaaag 480
gggagacatt atctatctgt tcttgactat ggaaataat gttgcagaat ctttgtcctg 540
tgtgtgaaga agcgatgagt acaggaccag aactgtccgg aagacgtatt tcaggagacg 600
cacatggcag tcgggcgccg ctctag                                     626


<210> 46
<211> 185
<212> DNA
<213> Homo sapiens

<400> 46
gaagaaactg tgaggtcaca atactttga ttcattatgt gaatatacat acacactcac 60
atctctatta ctgtatccat ctctatatac ttgaactcca tatgctctat attaacttcg 120
ccaaatccaa cccaacaaac agggttcatc tctgattttt cccccatat ttatgattct 180
cagac                                                           185


<210> 47
<211> 268
<212> DNA
<213> Homo sapiens

<400> 47
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23

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atggatttgc cacaagctgg ctttgaaagc agtggtagag tgtgaaagaa gttaccttaa 60
gacttcttgc cagttgcact gtaggtacga tgtactgttt gttgtgattt gactttcctc 120
caccaccccc ctgccccagg aagatgtgat cttgtgcatc ttgtgttcac gcagagtagg 180
gtagttggat ctttgtcaag tctcagtgat ccacatgcgt gcatctattt tgtcagtctg 240
cttgtctttg tatccatgtc atactgtc                                    268
```


```
<210> 48
<211> 108
<212> DNA
<213> Homo sapiens
```

```
<400> 48
gtcgacgacg acagcaatgc cgatccgcgt cacgcccgca accggctgcg gctgcaggtg 60
atgcctgccc tgcgcgaggc cttcccgcag gcgccgctgg cgctggcc              108
```

```
<210> 49
<211> 83
<212> DNA
<213> Homo sapiens
```

```
<400> 49
gatcgagatc ggcggcgtgc cgctggtgca tctgcccgcc gaggcggtgc gcgcgccctg 60
gccgctcgac gagcgcgagg tgc                                         83
```

```
<210> 50
<211> 475
<212> DNA
<213> Homo sapiens
```

```
<400> 50
aaagaaacaa gcaacaaata ggaaaatcaa atttttagaa gtaggtgcat aatagggaa 60
tagcttaagg ggagaactat gatgttaatt ctttgaaagt gagtaatgta attagaacaa 120
taacactatg agttttтcta taaacaaaat atagcaagat taagttgata acatacattt 180
ctaaaatttt ggcttcctta gagaaagcca accaaatata aaatttтaca gcagagtcaa 240
gttttttcag tttggcctat attttctttg gtaacactgt tctgaatgta tatgcagtgt 300
ttatttcaca acttccctct gaatgacctt tcaaaaatta atgattcttc acattcatga 360
ccagatgttt tctctgatgg aagcatctga tgtttgcagt catcaaataa gattcaaaat 420
gtctgtttca agcaaatcaa gtaaaacttc tccatcacat caaaagtaag gcttg       475
```

```
<210> 51
<211> 607
<212> DNA
<213> Homo sapiens
```

24

<400> 51

aaagaaacaa gcaacaaata ggaaaatcaa attttttagaa gtaggtgcat aatagggggaa 60

tagcttaagg ggagaactat gatgttaatt ctttgaaagt gagtaatgta attagaacaa 120

taacactatg agtttttcta taaacaaat atagcaagat taagttgata acatacattt 180

ctaaaatttt ggcttcctta gagaaagcca accaaatata aaattttaca gcagagtcaa 240

gttttttcag tttggcctat attttctttg gtaacactgt tctgaatgta tatgcagtgt 300

ttatttcaca acttccctct gaatgacctt tcaaaaatta atgattcttc acattcatga 360

ccagatgttt tctctgatgg aagcatctga tgtttgcagt catcaaataa gattcaaaat 420

gtctgtttca agcaaatcaa gtaaaacttc tccatcacat caaaagtaag gctttatatg 480

gttcacaagt agctatatga aataaacaga atttaaacga tcttaataat ttttttcttt 540

aaacaaggtg acaaaataac aatgccaata tataaaaact cctcattaat gataagtgct 600

agatgga 607

<210> 52
<211> 590
<212> DNA
<213> Homo sapiens

<400> 52

ctcctcatta atgataattg ctagatggac accatgtaaa gtatggaaaa tgcctgtctg 60

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gatgttttga tcagagtttt tagaaaattt ctaggatctg ttgcctttgg actttagagc 180

ttcttggagc cacatgtcag tactaaaacg ttttcttaag ccctcgcttt ccatagcaaa 240

aacatgttat gtccattatc cacctaactc atacttaaaa acaacaccca agatgctcta 300

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aattggtcga agctagttag ttcaaaaaag atacaaaata tggaatacca cctattttat 420

ttcctggcaa ctgtttcatt caaatcatag agtaacatat gatttactac actcctttat 480

gaatattaat ctcgtatctt cacagaatga cttaatatca ttgatcagct agaacatcga 540

cctcacctgt ctgttgtttt taacgaaatg tttattccta gtcaaaccac 590

<210> 53
<211> 217
<212> DNA
<213> Homo sapiens

<400> 53

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ccctcaacca catccctgat gaacttttgc cagtgccggt aattaacaat atcacaaggc 180

tgttctgatt gtctgtattt ctcagtgttt gttagag 217

<210> 54
<211> 430
<212> DNA
<213> Homo sapiens

25

<400> 54
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aacatcatca ggcagaagga aaaaaatagt atcagattga agtctgttct acacaaagta 180
atgaatacca gaaatgataa ctacctgggt aaatatataa gattattttc ttcttattta 240
aagtaagagt gagattctta tcaacaatag cataaaggct gaaggggaga aatggaagtc 300
tattagtgta atcttataca tgatgtggta tgatgtcact tgaatgtaga attataaaga 360
taaacagcat aaactcttaa agcaaccacc aaaataacaa agagttataa ctaataattc 420
agcaaaggag   430

<210> 55
<211> 2956
<212> DNA
<213> Homo sapiens

<400> 55
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tctgatactt ttaaggtgtc tttctgaaga taaaacctga tgtgtctgca atgctagagt 480
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26

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aactaccact ttacaccaac aaacaccagg tacagttttg tatctatcct ggagccaaat 1980
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<210> 56
<211> 517
<212> DNA
<213> Homo sapiens

<400> 56
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tgtccgatta ctgtcaaaga agacaggagg taagggtcag agtggaccac tgactgaata 180
tgagtcgcag aagtgttaga ggcagaagtc cagggccatt tccttaatat cgaagtgtct 240
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atcctgggag agcaccaggg tgagggaggg gtgaagatga gccccgtcag ggaagcgctg 420
gcgagtgtgg gaagtcacct gcccctcggc ctgtgagctg ctctgcttgg agtgactaag 480
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<210> 57
<211> 1490
<212> DNA
<213> Homo sapiens

<400> 57
ggggaaccag acgcccagtc acaggcgaga gccctgggat gcaccggcca gaggccatgc 60
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ggtctgccct caatctcccc tgcctccctc caggagagcc agggactcac ccggcccttg 180
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27

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tcccagacta actctggtca cagaaccatc ctgtctgcct ggaggggcgg ggtcccctgt 240
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ccatgaaatc acagggctgc gggtgtctgt aggtcttctc ctggtgaaaa ggtgagtagg 420
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cgtgaaactg ggagccttag gtgggaatac ccaggaagtc accctgcagc 1490


<210> 58
<211> 436
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (197)
<223> a, c, g or t

<220>
<221> unsure
<222> (432)
<223> a, c, g or t

<400> 58
ctctgtctcc tcataggaat ttcttagttt cttggctttc gaatgtgact caacccctcc 60
cttggcctgt ctgtctgctg tgtcgctttt aggttctgct gccacggcta actatgtttc 120
cctgtgtttc cagataaact tgtgagggtc agaagctgac agaccaagct cattttttcaa 180
gccaatctgt gtcatanaga gaccacgggt tttccttggg ttgggtcctt ctacctggtt 240
cagtcagctg tgaacaaaac ttgtggaatt tggtcatttt ccttaaaatg gagatacgag 300
agatcaccat ggctggcgtg aaactagttc tggatctgat tgtctttttca attgtttgtc 360
catcaggtga acccactctg aagggacttt tggtaacatt ttccccaaaa taaagatcat 420
taattaatta tnaaaa 436
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<210> 59
<211> 458
<212> DNA
<213> Homo sapiens

<400> 59
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cttggcctgt ctgtctgctg tgtcgctttt aggttctgct gccacggcta actatgtttc 120
cctgtgtttc cagataaact tgtgagggtc agaagctgac agaccaagct cattttcaa 180
gccaatctgt gtcatacaga gaccacgggt tttccttggg ttgggtcctt ctacctggtt 240
cagtcagctg tgaacaaaac ttgtggaatt tggtcatttt ccttaaaatg gagatacgag 300
agatcaccat ggctggcgtg aaactagttc tggatctgat tgtctttca attgtttgtc 360
catcaggtga acccactctg aagggacttt tggtaacatt ttccccaaaa taaagatcat 420
taattaatta taaaaaaaaa aaaaaaaaat gagcggcc   458

<210> 60
<211> 359
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (336)
<223> a, c, g or t

<400> 60
cggacgcgtg ggaaacacaa actgcatcat ccaaaaatac acctttggtc cacggatgcc 60
actggaagac atctgaattt tagacctcca gagagaagat ctgggtggct agctccagag 120
tggaggcatg cttgcttttt ctttacactt gtgaagagga atggatccgg acatctgcaa 180
tctgggtaga ggacggcagg cagcaagctt agccactcgg ccaggcttct cagcccttac 240
tctagacatg tgatccttcc tccacgtgat atacttcaca actttcttac ggctactcaa 300
ggcatcccaa gttaaaagga aggtcagatg tgattnatca ctttattatg ataaaaaaa 359

<210> 61
<211> 932
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (161)..(180)
<223> a, c, g or t

<400> 61

29

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tggccagaga catatgaaaa gatgccttag acatatagca tcttttctca tccacttact 60
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ttgggccagc tgtgtttggg taaactagtt aaggtggtag ggttgtttgg tcaggaatta 240
aatcataaag aaaaacaaaa cctctgaaat gaaaactcat ggtgagggta aacttcacc 300
ccttgtagtc acttatgttt aactggtcta ctggattttt ttaaaggtta agaaaacaca 360
aactgcatca tccaaaaata cacctttggt ccacggatgc cactggaaga catctgaatt 420
ttagacctcc agagagaaga tctgggtggc tagctccaga gtggaggcat gcttgctttt 480
tctttacact tgtgaagagg aatggatccg gacatctgca atctgggtag aggacggcag 540
gcagcaagct tagccactcg gccaggcttc tcagccctta ctctagacat gtgatccttc 600
ctccacgtga tatacttcac aactttctta cggctactca aggcatccca agttaaaagg 660
aaggtcagat gtgattctca ctttattatg ataaaaaaaa ttactatttα aatactataa 720
ataaatatta taataaatac taagctagaa ccatcagaat acatcacttc tgtatccagt 780
tttcaaagta tctttggtgt ttgtcaggaa taaataaaag taatcatttt atttctatta 840
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ttaaaaagat ttcttttggt ttcagaacat aa                                932


<210> 62
<211> 554
<212> DNA
<213> Homo sapiens

<400> 62
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ttcctgtgga ctttgtccca caccacctgc ctgggttcct tcctttagtc acttccagct 120
ccaggcacag cagttggtga ctccttggtg ggagccgtgt cccacccggt cctgatactg 180
ccgtcttctc tttcacagtc ctccaggctt gggccagcct tgggggcagc agagcttctg 240
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tcatttggtt ttgctttttt tgtttgtttg ttttcaccta attttttgcca gacttaagct 480
agttttgctg ccttttgaaa ctagtggaag aatcatttta tttcctgggg ataatttggg 540
ggcttttgaa tcca                                                      554


<210> 63
<211> 786
<212> DNA
<213> Homo sapiens

<400> 63
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acgccagccc tggcaaggca cccagaactc tccggaatgc ttgaaggcag ggcctggcct 120
ttccatgggg tccagggctg tggggtccct ggcggtactg tgggcctgca gagcggggca 180
tgtgggctga agaccgtctc cccaccatgg tgggaaggga caaagggtgg ccctggcaga 240
tccggacggg caggactggg tgtgtcccat gagagcacct ccttcctggc ctttcctgtg 300
gactttgtcc cacaccacct gcctgggttc cttcctttag tcacttccag ctccaggcac 360
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30

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agcagttggt gactccttgg tgggagccgt gtcccacccg gtcctgatac tgccgtcttc 420
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gtcgagatcc tgtgtcctga gagcggtagt cagggagagg gctggtcggg gcagggctgc 540
ccgggcagga cacaggatgc ggccggccag gctgggggcca aggtgttcag acctggactt 600
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ttttgctttt tttgtttgtt tgttttcacc taattttttgc cagacttaag ctagttttgc 720
tgcctttttga aactagtgga agaatcattt tatttcctgg ggataaatttg ggggcttttg 780
aatcca                                                             786


<210> 64
<211> 575
<212> DNA
<213> Homo sapiens


<220>
<221> unsure
<222> (411)
<223> a, c, g or t


<400> 64
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gtcttctctt tcacagtcct ccaggcttgg gccagccttg ggggcagcag agctttctgg 120
gctgacatgg ggctcattgc tcctttctcc aagccctctg agggacatca aaagcgtggg 180
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tatggctgga gttccccatg cctgccaatc tcctgtcgac tgcgagtcag ctccgatact 480
tcaccagatt cagccacctg ggggagctgg aagtgaatct cctcgtagct gagccttctg 540
atgagactgc agccccggct gacacctgga ttgca                             575


<210> 65
<211> 834
<212> DNA
<213> Homo sapiens


<400> 65
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ctctttcaca gtcctccagg cttgggccag ccttgggggc agcagagctt ctgggctgac 120
atgggctcat tgctccttct ccaagccctc tgaggacatc aaaagcgtgg acgcatcact 180
ttccaccatc ttgctgccca ctgtccctcc atcctgaggc ctcctaagca catgtgtggg 240
gtggcaggca cactgctgat agctgtggat gcggccgtga catccttcac ccctgccccc 300
atggcatgca tgatccatta gggaggaccg tctgcacaaa ggtctcttgc cctgtgcagc 360
ttcctgcaga ctggacttgc aaagtccagc ctgtatggct ggagttccca tgcctgccaa 420
tctcctgtcg actgcgagtc agctccgata cttcaccaga ttcagccacc tggggggagct 480
ggaagtgaat ctcctcgtag ctgagccttc tgatgagact gcagccccgg ctgacacctg 540
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31

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gattgcagca ctcatgaaag accctgagca gcaggaccag tttggcagag cccgaattcc 600
tgacccacag gaactgggag ataaaactct gtggttttaa tcttctcatt ttagagtgct 660
cagtgtccat gtggtgtgaa cacgcttcat tcaacctggg cccttgggag agatgctgag 720
tggttcccgg gctgtcccca ctccacacca tggcagtgaa gagctgctga agtacatgct 780
tcatagtccc ttgcgtctcc tctatgagta cagttcctgt ttgtggagta gcaa      834
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<400> 66
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ggattcctgt gaagacattt tcttttgata aaagaatatt gataagaata ttataccaaa 120
ttgaacaaaa gtagccacag tatgaaggat tcagtacatg gccaaataac ttatttcaaa 180
atagtttaga gttatattcc ttgaagacgg aggttggatg gggattaaat tttgtaaaga 240
cgccaatggc tgttaaacaa aagagctgag atggatgtgc tcttgaatta aaaataaaaa 300
tattttaaat atactattac atcataaaca ttctatgtct ctactttttcc atctagaagc 360
aagaattctt tagtactttc cgagcatcta ctgtgtagac tatcttgtgt tatgaccaat 420
tgcttatatt tatttac                                             437
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<400> 67
acaaaaccat atgcttcaac acctcaggtt gaccatttgg ggggagtgtg tatgggtgtt 60
ttaagatggc ggggtatgcc                                         80
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<400> 68
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aatggaggca ttgccagcct tctggccatg aaggagaaag tgatttcaac taacccagga 180
aactcttacc tctaaatgga gatacttcct gataacagaa gaaactgggc atctaaccca 240
gaaataccag ctgagtagga gaagagaaaa ggcatcagcc agtcaaggtt tcagaaggct 300
gccaacagtc tttgtaagcc accttgggag tagatgagaa cggcaatcaa tcaacatggt 360
ttggtgaaca aaccatatat tacaaagtgc ttctgtgaag tctgcatcct cacaactaat 420
gagtgagaca tttctcattg tttctgctca cccaggaata ccatgctgtg ccagctcttg 480
ccatttatta accaactgat aatggtgcag tgctgtagtc atggaagcta tttcaaaagg 540
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ttaaggaagt ctactggaat cctggttctt ctagttgcca ttcagactta ttttttaaagt 600
ctcattgaaa tgtaatgcat gttatggaaa gtcaggatga aataaaattg agatttttttt 660
ttt                                                              663


<210> 69
<211> 695
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (309)..(482)
<223> a, c, g or t

<400> 69
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atacatgtag taaggtatgt caataactca aatcttatgt gatttttta tgtacatgta 180
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33

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34

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35

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36

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<211> 93
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<213> Homo sapiens

<400> 72
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<210> 73
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<211> 299
<212> DNA
<213> Homo sapiens

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<210> 74
<211> 94
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (85)
<223> a, c, g or t

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<212> DNA
<213> Homo sapiens
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38

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<211> 547
<212> DNA
<213> Homo sapiens

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<210> 78
<211> 263
<212> DNA
<213> Homo sapiens

<400> 78
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tgcttttctg tggattgaaa aaaactgacc actgttaata tgattgtaca gtgacactgg 120
aaattatgag atgtgtgtct ggttagtcct gcttgtattt cagttgagat gcataccaag 180
tctgataatg cagagctttt ccatttcatg tgtctgttta ccattttcat gatcttaagc 240
aataaacatt tcttgacaac agc 263

<210> 79
<211> 765
<212> DNA
<213> Homo sapiens

<400> 79
gcgggaagag cacgcagccc tgcgagtact atttccgcgt gtaccactcg ctgtgcccca 60
tcagctgggt gagtcggcag aggggggcgcc gggccaggcg tgtgcagggc tcggccgagg 120

```
ctgagccggc gtcccgctcc ctgcctttct gcttcccagg tggagagctg gaacgagcag 180
atcaagaacg ggattttcgc cggcaaaatc tgactgcccc agcgcggctt cctctgaaga 240
tgcagtgatc ctgcatcttt ttgtctcgcg gagcccccggg tctcggttat ccaccccctac 300
ctcccagtgt ctaagccacg aataatgcca ccagccttcg agttccttgt ttcccttgct 360
ctggtctcca cgtgtatgat ggggttctca ggcccaggct tcgaccagag gaccctctgc 420
caccaccgtt tcttcctgtc cttgagctac cttggtgaac tcatgacccc aggcccctgc 480
tccaccagga tgtcccccag gtcctgccag ctgggaagtg ccagcatgaa cgcctccaac 540
ttcgtggaag ccagggtccc ctgcagctga gggacgccaa gcagacacac ctgccctccc 600
cagccagctc ctgtctgtat gggcgagatg actgagagcg cccacgtccc taaggctgtc 660
ctgaccctcc atgctgcgac aaggacaggg aatggtcggt cactatgggc ctggtgtctc 720
ccctccccca ccacccggtg ctgcccagct caagccagaa gtgac           765


<210> 80
<211> 162
<212> DNA
<213> Homo sapiens


<400> 80
cgctgcctca agaccaggac ccgccgcggg aagagcacgc agccctgcga gtactatttc 60
cgcgtgtacc actcgctgtg ccccatcagc tgggtggaga gctggaacga gcagatcgaa 120
gaacgggatt ttctgcctgt gcaaacatct tgacttgccc ca                162


<210> 81
<211> 986
<212> DNA
<213> Homo sapiens


<400> 81
agcgggcggt gcacgacggc tcccattggc tggggctcgg gcgtcctagc caatccggcc 60
gcggggtgcg tttctcctga cccgggtggg accgcacccc gcggactcag aagcgagcgg 120
caccccggga ccatcccaca gcagatccag tggccgccaa cgtcaggctg gagttgcctc 180
cttcgtggat gttggatgtg gaagcccagg agccccccaa ggggaaatgg tcgacgccgc 240
ccttcgaccc gcgcttcccc agccagaacc agatccgtaa ctgctaccag aacttcctgg 300
actaccaccg ctgcctcaag accaggaccc gccgcgggaa gagcacgcag ccctgcgagt 360
actatttcct gcgtgtacca ctcgctgtgc cccatcagct gggtggagag ctggaacgag 420
cagatcaaga cgggattttt cgccggcaaa atctgactgc cccagcgcgg cttcctctga 480
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tacctcccag tgtctaagcc acgaataatg ccaccagcct tcgagttcct tgtttgccct 600
tgctcgtggt ctccacgtgt atgatggggt tctcaggccc aggcttcgac cagaggagcc 660
ctctggccac caccgtttct tcctgtgcct tgagctacct tggtgaactc atgaccccag 720
gcccctgct ccaccaggat gtcccccagg tcctgccag ctgggaagtg ccagcatgaa 780
cgcctccaac ttcgtggaag ccaggtcccc tgcagctgag ggacgccaag cagacacacc 840
tgccctcccc agacagctcc tgtctgtatg ggcgagatga ctgagagcgc ccacgtccct 900
aaggctgtcc tgacctccat gctgcgacaa ggacagggaa tggtcggtca ctatgggcct 960
ggtgtctccc ctcccccatc aaccgg                                986
```

40

<210> 82
<211> 369
<212> DNA
<213> Homo sapiens

<400> 82
aacccaagat gactcgtctt ttggtgggag aattcactct gttcatgttt catttaacaa 60
ttgatctact gtacttaatt acctttggct tattttacat ttattggttt atcttgtgtt 120
tttcttccct ctgatctggt tatcgatttc cttttcttc ccctgttgca ctttccattt 180
cattattggc agctgtccct tctctggggt tcctaatcaa acacatattc tttagcacat 240
gcctcgatgg ggattctttt cgcagcaccc tcatctggag ctcacagaac ctgtcactct 300
gtaggttctg gtctttttc agcttaggaa catctatttg ttgcttgatt tgattattgt 360
tagtttgtt   369

<210> 83
<211> 923
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (354)..(565)
<223> a, c, g or t

<400> 83
aacccaagat gactcgtctt ttggtgggag aattcactct gttcatgttt catttaacaa 60
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tttcttccct ctgatctggt tatcgatttc cttttcttc ccctgttgca ctttccattt 180
cattattggc agctgtccct tctctggggt tcctaatcaa acacatattc tttagcacat 240
gcctcgatgg ggattctttt cgcagcaccc tcatctggag ctcacagaac ctgtcactct 300
gtaggttctg gtctttttc agcttaggaa catctatttg ttgcttgatt tgannnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
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nnnnnnnnnn nnnnnnnnnn nnnnccctg gataggaagg gataggaaga gactacttgg 600
tgccatgggg taggggtgag ggtataagta gatcagagtg ggaagacctc agccttgggt 660
ggcttgtctc tgcttcttgc caggtgggag ggcctgtcca cacctggatc cccgtaccac 720
agtgccagcc atgcccttcc ctgggctacc attgtccctt tcctcaccca gttggtagag 780
gagtcaggag gtgggaggcc gtgggctttg gtttttataat gtaaccactg tgggggtggg 840
ggaggatggt gaaccatgta tttcagtgaa atatttaata tatttaaata tcaataaaat 900
caaactcttt gtaaaaaaag ccg   923

<210> 84
<211> 338
<212> DNA

41

<213> Homo sapiens

<220>
<221> unsure
<222> (12)
<223> a, c, g or t

<400> 84
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ataatttttt tnttttaaa ggaaatgaac gtggaggact ggggtgaagg gccagcctgg 60
gtagtttaat cttttgggga agacatgact ttaaggagat tccctgcttt gtgacaggtt 120
gctccatgct gtcttgggga caagggcctg tactgccttc aaatctgggc tcaccccaca 180
ttttggtgag gggaagatag ggtgggggga taaggaggag aaaagactct agctttttt 240
ttctatgcat gatatactgt gtgggtttat caagagtgta gacacagttg ctgttctcaa 300
ataataggcc aaataaaatg cgattctttt tttctttg                        338
```

<210> 85
<211> 436
<212> DNA
<213> Homo sapiens

<400> 85
```
ataattttt tcttttaaa ggaaatgaac gtggaggact ggggtgaagg gccagcctgg 60
gtagtttaat cttttgggga agacatgact ttaaggagat tccctgcttt gtgacaggtt 120
gctccatgct gtcttgggga caagggcctg tactgccttc aaatctgggc tcaccccaca 180
ttttggtgag gggaagatag ggtgggggga taaggaggag aaaagactct agctttttt 240
ttctatgcat gatatactgt gtgggtttat caagagtgta gacacagttg ctgttctcaa 300
ataataggcc aaataaaatg cgattctttt tttctttgaa acacacagaa cagcccagct 360
ataaaacagg caactgagga agaaccaaac cgcataccgg caagactcta gcatgtcaag 420
gtcaaagact ctccag                                                436
```

<210> 86
<211> 462
<212> DNA
<213> Homo sapiens

<400> 86
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agggaacgtt ggatgtagtc acactgctgt tggtgttact tagaccttca ttttccacc 60
agactgtagt gttcaaaatt cttttagta agagaaccct ttttttctga acttttaca 120
accatctcca aattataaaa cataagactt ttttttagta aaaatatatt ttttacaag 180
cacagtggct tgcaccatgg aggggagagg aggtgttttg tccttggagc tgctggcctg 240
agagaacctt gtcatcgtgg gagctgggcc attcctacac agtggtctgg caatgacccg 300
gtggtggtgg aggcctgtga gtgggcactg gtaatgggaa cagctgtaaa accctggagg 360
ccagccccag gagagtgacc ttacccagga aagttctggg aaacaaacca cagggaggct 420
ttacaggaat ttttggttgt gcccacaggc aaggcacatg ag                   462
```

42

<210> 87
<211> 1435
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (1012)..(1119)
<223> a, c, g or t

<400> 87
ttagaggtag aagaactgac tataagcaga agtgtttgag gaggctgcat ggagaacaag 60
gggcatcatc ttggcccttg gcaggttggc aggatttgac ttggtgaaga gaacgagaaa 120
ggggacttta actgggagga ctactctggc tttgatttct ccatcatgcg gagattggtc 180
tttggaagtt gtagcttcca gagaccttcg atgtttgcta acatgtccaa gctctacatt 240
tattgattgt tggttctgtt catggctatg ttcaaattct tgtacctttt tgtcctccac 300
agtttcttgt ctcatccctg tcttccacct ctgctccccg ctcttgtctg gtctaattaa 360
cttcctctgt tggagcagct tcccctcttg ggtaaactca gacatgaccg cagcaaagca 420
gcgtggaatc ttctgtttgg tcagtgttcc ccccagcttc cccgcagata cagctgcatt 480
ggagcccctg aagacaaacc agagaagtgc tgcatcctgg ggggcaggag gctttgcttt 540
gcccagggct gggctcctga atgaattttg gtgcagcctt aacggccgag ttgtgctgtt 600
gaaggtgcac tgctctgtgt ccaggcactt catggagggg agaggaggtg ttttgtcctt 660
ggagctgctg gcctgagaga accttgtcat cgtgggagct gggccattcc tacacagtgg 720
tctggcaatg acccggtggt ggtggaggcc tgtgagtggg cactggtaat gggaacagct 780
gtaaaaccct ggaggccagc cccaggagag tgaccttacc aggaaagttc tgggaaacaa 840
accacaggga ggctttacag gaatttttgg ttgtgcccac aggcaaggca catgaggaaa 900
agaaatgtaa ttatagtttg taagtcgatg aaaagaggca atgagtgaca tgaaatagct 960
gctctaagtt tcttcttcct gtcggacagg aagaaatggg gtttatgca tnnnnnnnnn 1020
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 1080
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnc ttctgaggga agactgagat 1140
taagcagata actgtataaa tgcataatta cacagcatgg tgagtgctct gaaggataag 1200
tgtggggagc ctcatttaga ttggaggatt gtgaaagtca agagacagga gagtcaaggt 1260
gaggcaaggt gagtaagagc tatccaggca aagactgctt ggtaggggag tgtcccagca 1320
acgggaaaca acctggaaaa aatatgacac ctcaggggaa ctaaaagcag ttgtatgtgg 1380
ctgatgcaca gacagggaag ggcaggaagt gtgctgaaag aaggcaggag gagaa 1435

<210> 88
<211> 459
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (437)
<223> a, c, g or t

<400> 88

43

```
gtctggtttg agtctaggat gaaggtacct tcctccagga aggccctggt gttccttctg 60
ccagactcct gagggtctcg ccagttcaag cccacttgaa gcccagctcg tttggggtta 120
cttgaaccat ctgggggatt ccaactagta tctttagctc ctgacatgag ctgttctact 180
gtgggctcag cccttgtctg agactgtatc cctatagggt cccggtcttc tgttgacccc 240
tcaccttctg tgggcctggg catggacctc tgatccttcc atctgaagaa gtgtcaaaat 300
aaaagtccat gcttccggga atcaggaagt cgcctcaagg caaaagtagc tgagtgtttc 360
tatatctgtt ttgttttcct ttctaacttc tctttttggt gggtaattct tcaccatctt 420
gttgattctt taagtcntag cataacacac attttaaaa 459
```


<210> 89
<211> 1263
<212> DNA
<213> Homo sapiens

<400> 89
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gtctggtttg agtctaggat gaaggtacct tcctccagga aggccctggt gttccttctg 60
ccagactcct gagggtctcg ccagttcaag cccacttgaa gcccagctcg tttggggtta 120
cttgaaccat ctgggggatt ccaactagta tctttagctc ctgacatgag ctgttctact 180
gtgggctcag cccttgtctg agactgtatc cctatagggt cccggtcttc tgttgacccc 240
tcaccttctg tgggcctggg gcatggacct ctgatccttc catctgaaga agctgtcaaa 300
ataaaagtcc atgcttccgg gaatcaggaa gtcgcctcaa ggcaaaagta gctgagtgtt 360
tctatatctg ttttgttttc ctttctatct tctctttttg gtgggtaatt cttcaccatc 420
ttgttgattc tttaagtctt agcataacac acattttaaa aatccagttg ttttagttgc 480
tttctgtctc catagaaggt caccatggtt ctcagccctg tcggacctgg agcctggtac 540
catgaccagg gacagggagt cctcatgccg ttttaagcag tggtgatcta agttttattt 600
cttaggtgag tcaaggtcgg aaaagcttga gcccctgct ctaggggctg tacctgtccc 660
tttctccctt ttctcctgtc tggactaggg ttcgaagggg ctggtgggcc atgtggagac 720
caagtagctg acaatcccca ggacctgtgg gctcagacac agggccctgc acctctcagc 780
ccttccggtc tcagctcagc acctcccttg cctggcccct ctttcctgca tgagctccct 840
gcctctgcca ggaggaacct ctgtcctgtt tctagatgcg ccatatcctc tcccacctcc 900
tgctctttcc tccagttgtg tgcctcgtaa cctcttcctc cctccaaggc taaatcaaac 960
cctacctcct tatacaggag gaagtaattt ctgggttgat gtatgcatcc ggcagattca 1020
tgctgagcca acaggttagg ggctggagaa acagtgatga gcttaaccag gccctgccag 1080
cctgcccacc ccgagtctgg tgagggtagc aaaaaacata agtggaatt gataaataat 1140
ataatctatc catatccata tttttatttt ttattatttt gggacgaagt cttgctctgt 1200
cactccagcc tgagctacag agtgagaccg tgtctcaaaa aaaataaga aaaaaaaaa 1260
aaa 1263
```


<210> 90
<211> 554
<212> DNA
<213> Homo sapiens

<400> 90
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gctcgagctg ttttcttcag gtgagtagaa caatggcatt ttaaatctaa gaggcaccta 60
gtaaatacat ttatttcaat tcctttccta catagggaa gaaacagagg ctgcaaaaga 120
```

```
tttagttagt tcaagaaaaa acagtataat ttggagtttt tgactttgtg agttttgtta 180
cggcgctgac attcattctt ttgtgcgttc agtgtattca aatcttcaaa tctagagcac 240
attgtatgct gggcagaagg cacagtactt gaggattcag tggacagtga tacagaaaag 300
gctgctgtcc ttgggcactg atgagcctcg ggctactaca agtaagcagg cagtggcagt 360
aggtggaatg agggctgcag gtcctggcat catggatacc aatttgggct tagaatggaa 420
gcggaggctt ccttgaagaa cagcggtcta agctgagact tgtaggaata gtggtaatta 480
acaaacagac aggaagaaga gctttccagg aagacagcaa aacataggca aaggtctgga 540
gaggagagag agca                                                  554
```

<210> 91
<211> 435
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (406)
<223> a, c, g or t

<220>
<221> unsure
<222> (411)..(412)
<223> a, c, g or t

<220>
<221> unsure
<222> (421)
<223> a, c, g or t

<400> 91
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tattagtcca taaaggctat ttctagtatt aaacaatgct taagaatagc ttggatccat 60
gaaaactttt gagaaggagg acaaagcaga cggaacctaa tctctgaaca atttcaatta 120
catcttttac aagtggctgt tggctagtca ttaaaaatga gccattcaca cttgtggaca 180
cctttttttgc catgcagact tgacttgcaa agcctttatt atccctggtt aagaacagca 240
cagctaataa aaacgaatca tatggctttta aactacttgc atccaacagg gacatcctaa 300
aaatggtccg gatagtgact tcatgaccat ttaggctgca agtgccatag ttactaatga 360
gaacagatat ttccaaatgg cggcaataga ttatggaaaa tggagnaagg nnagagagta 420
ntttactttc agcta                                                 435
```

<210> 92
<211> 580
<212> DNA
<213> Homo sapiens

<220>
<221> unsure

45
```

<222> (551)
<223> a, c, g or t

<220>
<221> unsure
<222> (556)..(557)
<223> a, c, g or t

<220>
<221> unsure
<222> (566)
<223> a, c, g or t

<400> 92

```
aaaaaaactg tttagaaaac cttcatattt actctcccgt tcaaactatt ggccctgatt 60
tttacagata atcaaaagtc aggctgccaa acttattttc tttgaatttg gaatatcttt 120
taaaatttgc cttttctttt cttattatta gtccataaag gctatttcta gtattaaaca 180
atgcttaaga atagcttgga tccatgaaaa cttttgagaa ggaggacaaa gcagacggaa 240
cctaatctct gaacaatttc aattacatct tttacaagtg gctgttggct agtcattaaa 300
aatgagccat tcacacttgt ggacaccttt tttgccatgc agacttgact tgcaaagcct 360
ttattatccc tggttaagaa cagcacagct aataaaaacg aatcatatgg ctttaaacta 420
cttgcatcca acagggacat cctaaaaatg gtccggatag tgacttcatg accatttagg 480
ctgcaagtgc catagttact aatgagaaca gatatttcca aatggcggca atagattatg 540
gaaaatggag naaggnnaga gagtanttta ctttcagcta                         580
```

<210> 93
<211> 724
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (297)..(602)
<223> a, c, g or t

<400> 93

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tactgatgtg cttttgattt gtctggaggg tgactactac ctctttgagg tgcctcctgg 60
gaccctcaaa atattaactt ttatactctg tgtagcctgt actttaagcc agaacattca 120
aagtacactg aagaaatgtg ttgaaaatct atgcaaccat tttcgcatta tgtactagca 180
aataaacaat ctttaatttc tggaattttc cattttcctc agtgatattg ttgattgatt 240
tgtagttttc tttctttgct aggtttcagt atcagggctg taccaatttt tttcttnnnn 300
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 600
nntgtgccat ctttatgaag tgaattatga agctttccaa tcttttttat tttgtagaac 660
```

```
agtttaaata cacaacaata tactaagttc ttagattgaa gctgttttta aatcacaaag 720
acag                                                                724


<210> 94
<211> 586
<212> DNA
<213> Homo sapiens

<400> 94
ctaagacagt ggccaatctg actgtgaaaa taagggcagg ctacactgga gagcagggat 60
agggacaccc gggggggcaga gatgtgggtc accttagggg aggacacact caggaggccg 120
gcccatgatg gcacatgaag gctgggagca cggtgctcaa ggatcagctc atcagggaac 180
ttgaccaaat ttagagcaag gcccttttgat agtgtataga gatgtttgtt ctaagcagca 240
atagaaagct tctggaatct gttccattaa gaggtgatag aaacaaaata tgagtcgttt 300
tggagttgtt ttcagcagag tcacaatgat agcaccatta tagatatttt acagacataa 360
tcctgatctt ttgggtggat daccagaatg tctagttggt tcactgagcc ctggttttga 420
cccaatatgg taattcgtga actcttagga ggccagaaat atcctaatcc tgtgcaaggc 480
agggacccctt ggactgtaac tgtcttgtct gcttttggtc gtgaaggaga ctcagaggcc 540
caaacaagaa tttaggaaaa agagcaatag gattgtgttt aaaaaa           586


<210> 95
<211> 491
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (480)
<223> a, c, g or t

<400> 95
aaataattta acctaggaaa agaaaaagaa aattgaaaat tggagctaaa ataatttgat 60
ttttccctca acagggttat tggctgtctt ttaagtgact aaaagagcgt atctttatgt 120
gaattttagg catggtcata tgattaatac aaggataaag caaccaaatg ctctcagtat 180
ttattcccgt gctatttgtc tgttttttag ttcatggagt attgtattgt acttggtaat 240
ttgatgcttt tgagatgtcc tttagacaga tttttaacta caggacttcc tctgtagaat 300
cgacaatgtg tttcactctc tgtggcattg acaatgtttt tgaatgccta attgttcagt 360
agaactccgt ggttattatt acaactttgt acattattat aaatatttta tattagttgt 420
atattccact gcagatagca accagaaaac taaaatacag aaatattaca tattagaggn 480
gattataatg g                                                        491


<210> 96
<211> 634
<212> DNA
<213> Homo sapiens
```

<400> 96

```
aaataattta acctaggaaa agaaaaagaa aattgaaaat tggagctaaa ataatttgat 60
ttttccctca acagggttat tggctgtctt ttaagtgact aaaagagcgt atctttatgt 120
gaattttagg catggtcata tgattaatac aaggataaag caaccaaatg ctctcagtat 180
ttattcccgt gctatttgtc tgttttttag ttcatggagt attgtattgt acttggtaat 240
ttgatgcttt tgagatgtcc tttagacaga tttttaacta caggacttcc tctgtagaat 300
cgacaatgtg tttcactctc tgtggcattg acaatgtttt tgaatgccta attgttcagt 360
agaactccgt ggttattatt acaactttgt acattattat aaatatttta tattagttgt 420
atattccact gcagatagca accagaaaac taaatacaga aatattacat atagagagaa 480
tataatgtac aaaaaaaatc ttgggagatg agtgctttgg gtttaattct atttttactg 540
aaaccagaga ataataggat tcaaatctac ctaatttttc tattttcctg attttccatt 600
ctgtatgctc ttctttgaat tttttccttg gtca                            634
```

<210> 97
<211> 397
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (326)
<223> a, c, g or t

<220>
<221> unsure
<222> (331)
<223> a, c, g or t

<220>
<221> unsure
<222> (337)
<223> a, c, g or t

<220>
<221> unsure
<222> (371)
<223> a, c, g or t

<400> 97

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tccttataca attagaattg catttatatt agggagtttg atattatccc acagatcctg 180
gatgatatat ttcattttct tccttttctt tttcctagtg tttcagtttg gacgagtttt 240
atcgacatat ctttaaggtc actaatgatt ttctcagctg tgtcaagtct cctgataagg 300
ccaataaaga gactatatct attatngtgt ntttaanttc tagcatttcc attttattct 360
tagagtttaa nctctctaat gaaattaccc atcttat                         397
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<210> 98
<211> 342
<212> DNA
<213> Homo sapiens

<400> 98
ataaagatgg ggtgagggaa gaaaagatga caaaaggaga ggaccaggca tgagaagagg 60
aagaggagaa tgcggaggag gctgcttgcc tgctgtggga tggatggcag gggcacttcc 120
ccagactcac ttttctcaga tgtaaaactg accagccttg tgccacagat gtgaagatag 180
ccccatagaa cttaaagagc agaccataac ttcccatgaa tgagagctac taacatttac 240
atctgaaaaa caatttggat acttacccaa gtctccaaca aacaaagtca cactgaagct 300
ggagagcaca ctcataacac ccggaaaaac attttttttt aa 342

<210> 99
<211> 873
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (338)..(528)
<223> a, c, g or t

<400> 99
ataaagatgg ggtgagggaa gaaaagatga caaaaggaga ggaccaggca tgagaagagg 60
aagaggagaa tgcggaggag gctgcttgcc tgctgtggga tggatggcag gggcacttcc 120
ccagactcac ttttctcaga tgtaaaactg accagccttg tgccacagat gtgaagatag 180
ccccatagaa cttaaagagc agaccataac ttcccatgaa tgagagctac taacatttac 240
atctgaaaaa caatttggat acttacccaa gtctccaaca aacaaagtca cactgaagct 300
ggagagcaca ctcataacac ccggaaaaac attttttnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntg aggagggcaa 540
aaatcacctg gtgaccattg gacaggcccc agagacaaat cttcttacct gggcaattca 600
gaagggagcc aagaccacct ggtgaccatc aaacaggcca tctggaggca aaactcctta 660
tctggggaat ttagaagtaa tcaaacttcc ctagtatctg aagacggcat ctgatcatga 720
tacaggaact agaaagaaat catttaggca gttagtgagg gtgagggaag agagaggccc 780
tctcatattg tttatttagg ccattagtga gggtgaggga agagagagac cctctcatat 840
tgtttcatat tgtttttatac tcagtacctg att 873

<210> 100
<211> 297
<212> DNA
<213> Homo sapiens

49

<220>
<221> unsure
<222> (48)
<223> a, c, g or t

<400> 100
ggaaaaggcc cccttaacct tcctcctcag gcccactcag caaatgtngc cactttgtgg 60
ccactttgtg taaggcattc cagagatctg gtgaggcacc tatctacaaa tatttataca 120
cacacattca tatatggttt cagtcacaaa atggggtcat tctctcccct gacctatcat 180
ttagggcatt ggaacatggc tgcatgtggc tctgtttgtg agggtccagg ggatggacag 240
ggaggctctg cattattttg cttttaccaa cattgcagca tgaacgtttt tttaact 297

<210> 101
<211> 258
<212> DNA
<213> Homo sapiens

<400> 101
aatataaata cgcctttaat agtaacacct aattacctaa caccatcaaa aatggggtgc 60
tccatgaaga agcacataat tcaaattatt gaagtttatc ccttctaatg accacataga 120
tttctcttgc cccattaaaa aattagataa tcagtatttc taggatagtt gttttcttcc 180
aaccaattaa ggcataatct atgtagcaga acattcagag gatgatgcct ggtcaacatt 240
tgaataaaca atcactgt 258

<210> 102
<211> 712
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (603)
<223> a, c, g or t

<400> 102
aatataaata cgcctttaat agtaacacct aattacctaa caccatcaaa aatggggtgc 60
tccatgaaga agcacataat tcaaattatt gaagtttatc ccttctaatg accacataga 120
tttctcttgc cccattaaaa aattagataa tcagtatttc taggatagtt gttttcttcc 180
aaccaattaa ggcataatct atgtagcaga acattcagag gatgatgcct ggtcaacatt 240
tgaataaaca atcactgtga tgttacctct atttaagatg actccaataa aacttctatg 300
gtttgcatta ttagttgatc agactttaag cattatcttt tgatagggtc aaggaacctg 360
tcttaactcc ccatctctga ccaaaatata cttgttttct ataagctata aagccagata 420
gccaatttta tgagaattgt ccctatacta tatccatgtg agcgatgagt gcctggcatg 480
aagatgcata aaggaggcag taatatacaa caactgaagc ataacctctg gagccagtct 540
tcttcagaca aatcccaatt ccattactca ctggccacct aaacaagcta cttaattcat 600

50

```
ctncctcagt tttcttcaac tgtttaatgg gtatgatcaa caaaccaact tcagtgggtt 660
atcataaata ttaataaatg agagaatgca tgtgaaacaa agctataagc aa           712
```

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<210> 103
<211> 173
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (96)
<223> a, c, g or t

<220>
<221> unsure
<222> (140)
<223> a, c, g or t

<400> 103
gaatgtggct ggtgagtagg cacttggtgt ggcagtgtgg ctagtgggta agaacatggc 60
tggtgattag gcatgtggtg tggcagtgtg gctggngggg acgagcatgg ctggtgggta 120
agaacgtggc tgggagtagn agcatggccg gtggttggga atgtggctag tga          173


<210> 104
<211> 688
<212> DNA
<213> Homo sapiens

<400> 104
tctgaatgtt ttggtgaata aatctgttct tcagcaaccc tacctgcttc tccaaactgc 60
ctaaagagat ccagtactga tgacgctgtt cttccatctt tactccctgg aaactaacca 120
cgttgtcttc tttccttcac caccacccag gagctcagag atctaagctg ctttccatct 180
tttctcccag ccccaggaca ctgactctgt acaggatggg gccgtcctct tgcctccttc 240
tcatcctaat ccccttctc cagctgatca acctggggag tactcagtgt tccttagact 300
ccgttatgga taagaagatc aaggatgttc tcaacagtct agagtacagt ccctctccta 360
taagcaagaa gctctcgtgt gctagtgtca aaagccaagg cagaccgtcc tcctgccctg 420
ctgggatggc tgtcactggc tgtgcttgtg gctatggctg tggttcgtgg gatgttcagc 480
tggaaaccac ctgccactgc cagtgcagtg tggtggactg gaccactgcc cgctgctgcc 540
acctgacctg acagggagga ggctgagaac tcagttttgt gaccatgaca gtaatgaaac 600
cagggtccca accaagaaat ctaactcaaa cgtcccactt catttgttcc attcctgatt 660
cttgggtaat aaagacaaac tttgtaaa                                     688


<210> 105
<211> 977
<212> DNA
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51

<212> Homo sapiens

<400> 105
ggcttggaga gggtcacaga ggctagtagc tgtgtggact tgcaggcagc cccaaatgct 60
cacctatgtg cagagtcagc atgtcctgcc tcccctggta atgtggtcgc ctgcatctct 120
gtggccagcg ctctcgttca tcattcagtc tgatggcttg agtgcctcta tgtttgctac 180
atgctgagac cgtattctag tgccgtattc tggaggtact gggtgtacct acagatttaa 240
gaatgcaaat ctggaggtac acccagtgga ttcaaagtag tctcatagaa caaagagact 300
tatatagtga cctttgctgc atccactagt atacaccatc tgaggtctct tgaactgaaa 360
atgaatgtgg aagcaaggga acagtgtgat gttcagctct cagatctcac atggcatctg 420
atttggcttg aggtgcctcc cctcctctct gtcccctggc tgtgggctca tggattggca 480
gagcccagtt atggcttccg ttttacttgc tataatatcc agaggcaatg tactagtcta 540
cctagaaaat tgtgctcacg gcatcccttt gtcacattaa taagcattat ggacactacg 600
acattttatt aagtattttg ttctggtatc tacttgatta tagtaaatta tcaaaatcct 660
tatttagctc atggactctc attaaagcat gttctggaaa ccttggccat aggttaggag 720
cctgtaaagt ttgattcatt gcaagatata agtgattagc agttggtagt agtgacattg 780
atgggcccca ttaaaaggtc tattggatgt ggtggtggca tagcgatagg ttggagttgg 840
aggtcagcat ggatgtctct gatttagaac caagcttacc tttgcataac ctatagtgac 900
actctcttca tctccccacg ccttagccat gtctccctga ggttcatact gtttggaatt 960
tcacaggctc atttatc   977

<210> 106
<211> 500
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (357)
<223> a, c, g or t

<220>
<221> unsure
<222> (367)
<223> a, c, g or t

<220>
<221> unsure
<222> (391)
<223> a, c, g or t

<220>
<221> unsure
<222> (410)
<223> a, c, g or t

<220>

52

<221> unsure
<222> (430)
<223> a, c, g or t

<400> 106
cagagcaggc attgacctag atgtcttccc ctgccttcat tgggagggtg ctgagccacg 60
ggttccacct ctgccaaagg cacacctagg agactcctca tgtccagctg agaagagggg 120
gacacctcct gtctgagact gcagctcaca ctgctgcatg cttcctggac accatctctc 180
tgaccttggt cgcatctgcc tagcctgcag ctacgttctc tgacctccag ctcttcctct 240
ttctcccctc ggtaatacca aagtctcaag aacacagccc tcacttctag acagaaaggc 300
ctcaccagga cccacctgtg tggcccaggt gtgacctcat gtacaaacac atctccnaaa 360
atcaccntct cgtcatcatg gaccctagta ntatccatga gttaacnctn atttctgtgt 420
taatcggggn tgcagcacat tttggtgcag attcattgtg gctttggggt gccatttggg 480
actctccccc atgcacaatg   500

<210> 107
<211> 476
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (466)
<223> a, c, g or t

<400> 107
gccatctttc cactcattcc ttctcaaaag gaatgtagta ccatatagta gttaagaata 60
tagacactgg agccgatctt cttgagttcc aatagtggct cttctacttt ttaaatctca 120
ttttccttca tctttaaatt gaagatagta acaatctcat ggggttgtga taactaaggg 180
ggtaatgcat gtaaagtgct tagaaaatgc ctggacatag gaagctctaa gtttgctgct 240
actactgtta ttatggttac tattattaat cattgcaagg aaaatgtatc aacagatgaa 300
tttggttcaa tactgccttc tagttttgtg accttagaat ttataggaac aaaaaagatt 360
tgaagggagg ttgggctgga tcatagagag ccttgattcc atgtttagg atgtatacac 420
agtgagaagt ccttcaggtt ttggtcctgg gaagagttgt gaatcngaaa gttaac   476

<210> 108
<211> 834
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (824)
<223> a, c, g or t

<400> 108

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ataagtatgc atgcttcata tacttcattt attctttctt ccttgaagcc tctcctcttt 60
attaggcact attcatttgt ctacttggta cctgtatttt tttaatgtca ctattttgac 120
agtaccaata aaggtaaagc cactcaatta cgcagggctc tctctttatg ctttgggtag 180
gtgcacctgt gcaactgagg ggacggtcag tgttatcaag gttacctgtt attacaagta 240
gaagaaccca caaagatcag gagagagctc attttcctcc attagtagga ggtaggacta 300
tacattcaca aacacgaacc ttaaaatagc tcacaaaata gtgtcataca tgtacccagc 360
catctttcca ctcattcctt ctcaaaagga atgtagtacc atatagtagt taagaatata 420
gacactggag ccgatcttct tgagttccaa tagtggctct tctacttttt aaatctcatt 480
ttccttcatc tttaaattga agatagtaac aatctcatgg ggttgtgata actaaggggg 540
taatgcatgt aaagtgctta gaaaatgcct ggacatagga agctctaagt ttgctgctac 600
tactgttatt atggttacta ttattaatca ttgcaaggaa aatgtatcaa cagatgaatt 660
tggttcaata ctgccttcta gttttgtgac cttagaattt ataggaacaa aaaagatttg 720
aagggaggtt gggctggatc atagagagcc ttgattccat gtttttaggat gtatacacag 780
tgagaagtcc ttcaggtttt ggtcctggga agagttgtga atcngaaagt taac        834


<210> 109
<211> 498
<212> DNA
<213> Homo sapiens

<400> 109
tttaaattgg gagttaagga tgagcacttt tactgtatta aaaaatactc accagttaaa 60
aaaaaatact cttttcccct tcctcggaca cctaaatcta agagaacaac tcctatataa 120
aaatgatata aaaatcatac attttggaag tatgtttcta actgttctga gaggctgcat 180
ggtaaagctg aagtgaaaga tgtattttaa atctgtatat atgagcaagt atatattgat 240
gattgaagct aggtgctgcc taaatacatg gcccagactt tgaggaatta tagtgtaatg 300
gctgggaata caggtttgga gtcacaccgt agagctgaaa gcttggcttt tatttagctg 360
tgggtccttg ggcaggatac gtaatctgtc tgtgcctgaa atacccacca cacccatcct 420
gtaatggggg gataataagc ctgcctatct catggggcta ttaagaattt tcagttaact 480
tttacttatg aagtgcta                                              498


<210> 110
<211> 259
<212> DNA
<213> Homo sapiens

<400> 110
tttaatgtgg tttagtttta gtcacttaga tttgcttttt atggagtgac tggagtttgg 60
ggaggggagc agggaggttt ttctttttttt ctttataaca ctggctaaat attttaatta 120
ctgctataga aggaagaagc taaaagtatt gcattcacaa atattgcata gattatacaa 180
acacagaaat atatgcatat gcatgtttaa aatatatgcc acatatcaac accatgtatc 240
caacttgaat aaggtcatt                                              259


<210> 111
<211> 414
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54

<212> DNA
<213> Homo sapiens

<400> 111
atgaaaggga tgaggggaac tcaaagttac aatgtcctac ttggagcagt aagttcagta 60
gacatatcac ttgcctcatt aacatcaagc atcccaaaac ccagtctggg tcagtttttgc 120
ccagagtggg gtttgtagaa cacgggttct cctgggatcc tatacctagc ccagaatcag 180
ttgcaaaagc caggccatag caaattgtcc tgccagccag atagcagaga atctgacggc 240
agcaggcaga aggagccgct ccattgcagt aagccaagat cgcgccactt gcctcattac 300
atcaagcatc ccaaaaccca gtctgggtca gttttgccca gagtgaggtt tgtagaacac 360
gggttctcct gggatctata cctagcccag aatcagttcc aaaagtccaa aaga 414

<210> 112
<211> 589
<212> DNA
<213> Homo sapiens

<400> 112
ctgggcaaca ttggggagac tctgtctcta aagaaaaaaa ggagagctgg tggtgaaagt 60
gtgaaggacc caggaagtac agacactggt ggtcaaagaa caagggtagg agtgtcatca 120
aatgatagtg ttggcagcat gggagctgtg ggtagagagt gagataccta aatttatgat 180
ttctgggtgg cagtaacttc tagggtgtgg ctgtgggagt gggcctctga atggggtgga 240
ggagaaaatc attaaagatt agaaaatctt gggatttaga ggataggttg tgggatgggt 300
gatacacgtt agtgttgcat ttgcccaggt taacgccaag agttggcaga gaaaataata 360
ctgacctaga ctttaataaa ggatttggga atgacagaga agcaacagta aaaataaggg 420
ataattagat gtttgggtgt ttcgcctggc tgtgtctgtc ctgtgtctgg ccaattatta 480
caatgtattt acactgtaaa tacatgtaat tcatataata gttttataag tagcaaaatg 540
tagtttaata aaaaaccatc ttagtcttct tacagaatat ttagttacc 589

<210> 113
<211> 471
<212> DNA
<213> Homo sapiens

<400> 113
cccaggctgg gggtcaggtg aggagggagc tgggatccag caagcctagt gaaacccagg 60
ggacagtgga ctcggtcaca tccaggatgg tgatcaacag ctgcatcatc ccgcttcctt 120
ctcaagcgac aattccagag ccttggccac acggtgcttg tatctttcgt attcagaccc 180
cctggggttc cagccccтta ctgccttcac tttcctctca cccctttgact catctttcct 240
gctacttgtc acttgagata cctaagatga tgtgtgttat ggagaggtta gagcaccagc 300
ttcagaacca ccctgtgact ttggcctagt cacctgacat ttctagactt tggtgtcttc 360
attcataaag gcagtgtgga ctgcttgctg atgttatcgt gaacctgaat tccttcttag 420
agtttctaag tgctttctgg ggattaacct tttaaatcct tgcagtagcc c 471

<210> 114

<211> 1032
<212> DNA
<213> Homo sapiens

<400> 114
aatgagggag ctcttgagct cccttgatga gcaccacaca gggccctctg ggaagcagta 60
agaacccatc ccagggctca ataagaacct aacccagcct gggatggccc ttccctttct 120
gccaaggtcc ttcccatgcc aaacctcagg cccttatctt ggtatctgtc accacccacc 180
accccccga cacacacaca gtcatgcaag ttgtaagaca gtgacagaag atttgaagaa 240
gaccaccaga gcaggggata gcagaacatg cagacttagg gggaagccag gcgttcatac 300
caaagaatta gacctgttgg gtacccaggc tgggggtcag gtgaggaggg agctgggatc 360
cagcaagcct agtgaaaccc aggggacagt ggactcggtc acatccagga tggtgatcaa 420
cagctgcatc atcccgcttc cttctcaagc gacaattcca gagccttggc cacacggtgc 480
ttgtatcttt cgtattcaga cccctgggg ttccagcccc ttactgcctt cactttcctc 540
tcaccccttg actcatcttt cctgctactt gtcacttgag atacctaaga tgatgtgtgt 600
tatggagagg ttagagcacc agcttcagaa ccaccctgtg actttggcct agtcacctga 660
catttctaga ctttggtgtc ttcattcata aaggcagtgt ggactgcttg ctgatgttat 720
cgtgaacctg aattccttct tagagtttct aagtgctttc tggggattaa ccttttaaat 780
ccttgcagta gcccaataag gtaggtattg ttgttatccc cattttacag gtaaggaaac 840
tgaggcacag agagtaattt gcacaaggct tatggctttt tagtggagga gccaagagtc 900
aaattaagag tggttgagtc aggcatggtg gcccctgcct atagtcccag ctacttgaaa 960
gagtgaggtg ggaggatcgc ttgagcccag gagttcaatg ctacagagca agacctcaac 1020
tctttaaaaa aa   1032

<210> 115
<211> 440
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (428)
<223> a, c, g or t

<400> 115
ggactacatc catgttccac cacaccaggc tccaattaca ttttgacttc tccacttgga 60
tgtttaaaat gcttctcaaa tttaacatat cctaaagata attttgtgtc tccccacaaa 120
acttgctctt tttgcattca ttgctgtctt agttaatggc accaccatcc atactgttac 180
tttagccaga aacctttgaa acatcccaat tggtctttct gattttctct gtttcacaac 240
ttattctcca cagacaggat actccaaaca gtacccaaag ccattgtctc ttatactttt 300
caatctataa aatatacata cataagagta tataaaatat attataaagt aaatatccat 360
gtatccaaac acacaggttt agaactggga acacaatatg caaaagaata atattgggac 420
cccctancc tcatgtcata   440

<210> 116
<211> 249

<212> DNA
<213> Homo sapiens

<400> 116
aaaaaaagtt ctgacaattt gtttgctttt acattttcaa atttgtgaaa tgtagagata 60
attttgtttt caaatctttg taattccctg aagcaaatac tttcaagcca gttgcaaaat 120
gctgctttag aaataattca tataaacatg cttctctatt taatcacaag gggagatgtg 180
gagaatggat gttttatttt ttcagtagtt tttgctctat aaaaatatta aattgctatt 240
atgattact 249

<210> 117
<211> 1017
<212> DNA
<213> Homo sapiens

<400> 117
gccctttttt ggtgtgcccg ctgaatgagc actccaggct gtggagttcg ggacatgcct 60
tggtttgtgg ggaccatgct gcctgcctgt cgagaccaag catcgatact gtgtgtctac 120
ctgatgaaag tgtccagtat gtgtctgcat gacttgggga cactaagaaa accaaaggga 180
ttagcaacaa agagagcttg tcacctttgt gcggaaccag ctggcatctc acagggacaa 240
cctacaacct gagctgctgc gtcctcacta aatctgggcc cctagggacc ccgttttact 300
cctgctctcc tggagcttat tacgggcctg gctaccaaag ggaaagaggg gaaaatagac 360
caggagcctt atgctagaac catttatttt gtttcacgtg atgcagacag agataaaact 420
gcaaatttaa tgaaacttta acaatcagta caatgtttct ccttaagaac tttgtaaata 480
gcatttatct ttcaagagtt ctttctctct ttttgtgatt attttataaa cttaaaggaa 540
aaagagaaaa agtcagtggt tccagcattt gctttagtct gtgacttaaa tggattataa 600
ctcttgaccg ctgacattta ccaagataaa tcagtggtca tagatgtgga gcttgatgtc 660
tcttcggctc tgggaccaat ccccttggac aaaagttttc ctgtgttctt agtattctga 720
actggctaca gcaactttta ggaaaataaa ggttacaaaa aaagttctga caatttgttt 780
gcttttacat tttcaaattt gtgaaatgta gagataattt tgttttcaaa tctttgtaat 840
tccctgaagc aaatactttc aagccagttg caaaatgctg ctttagaaat aattcatata 900
aacatgcttc tctatttaat cacaagggga gatgtggaga atggatgttt tattttttca 960
gtagtttttg ctctataaaa atattaaatt gctattatga ttactaaaga taaaaaa 1017

<210> 118
<211> 332
<212> DNA
<213> Homo sapiens

<400> 118
ctgcctccac gtggattacc acatttctca cctcatccta caaggcagtt cctgtttcta 60
ttccccctttc acacaaaata acttcgtatg ttgttagtaa gcaggagaac cagcctttga 120
actcaggact gtttaaagac caaggtcctg gccactgaaa taaaacatct gcaactggca 180
gattaatgaa aggctctaga aggaaacaaa aaacccaaga gactgctggc agtgatagct 240
gagttttagg gggaaaagtt gttttagttt tccctgtata ctttcttgtg tagtttttaaa 300
aatctacagt atttacactt tcaaaacaaa at 332

```
<210> 119
<211> 344
<212> DNA
<213> Homo sapiens

<400> 119
gcgcagggga aattataggt ggctgtggtt gtaattacaa agttctgtca cgtcttcatt 60
gttaggagga aaagaattca ataatcctat cagttctgct gtaaaacaaa tgagctatga 120
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<210> 120
<211> 718
<212> DNA
<213> Homo sapiens

<400> 120
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ttctatacct ttgtcagtaa cctcttagtg atgaaataaa aaagattagg taatcatcca 180
gcaatgggga agaagttaag gaacaaagag ctcagattaa actagttttt agaatctaag 240
catttctgca tgaatttgaa tcatggaaaa caaaatgtag cactccaaca tttgatgcaa 300
aactaaaagt ggaatactgc tttgatattt gaatgaattg aaaaataatt aacatccttg 360
gaactgtatg taaagaagga cttcacaagt attatagata cccccaacct cagccctttt 420
cccatgtatc tctttgatca catccctacc tcatagatca cccatgtgct gaagactttc 480
agttctgtat cttcattcta gatctcctga actcaagatc agaatatctt tctgacttct 540
gactgtgtat ttctggatgt tatacaagaa cctcagctca aactcagtat tccctaaacc 600
attgtttttg aaactttatg ttggatgtga aatctgtatt gtagaataac attaaaaaaa 660
gaaagaatag tatgcaaaat atcagagtgc attgtatgta gcaagagtag gtattttc   718


<210> 121
<211> 2617
<212> DNA
<213> Homo sapiens

<400> 121
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gtggacaatg taagaaaagc tccccggaga agctgtacag aagctgcctc ctcagcagtc 180
agggccaggt accggagctg tttttaccca aggacagggc cggccccaag tcatcccaga 240
gctgccatgg cacccctca gtcgggtcct gaggaatcct acacaagcta cttatatcag 300
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58

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gactttctaa gcataaaggc aaaaaaaagt cataaaaatg ctatagcagt ttgagactct 540
atgcaggaaa gggcatcatc acgtgcatgg atgaatctgt atctaatttt aaacaatttc 600
caatggtgcc tgtttccttt tctttgaaaa tctctggaga aatagttcct cttgctgtgt 660
ctttctttag gcaagaattt ttactaattg atgtgtagtc tgaatcctgg ctaagtataa 720
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tggatgtgaa atctgtattg tagaataaca ttaaaaaaag aaagaatagt atgcaaaata 2580
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<210> 122
<211> 373
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (74)..(294)

<223> a, c, g or t

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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnncactaa 300
tctcaaagag ggcatgatct tcaagaatta ataaccctct caagtctcta caatctaatg 360
caattacctt ggg   373

<210> 123
<211> 308
<212> DNA
<213> Homo sapiens

<400> 123
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gggctgtctc tccctggtca gacagggagc tccccgaggg cagaggtcct gtctcctcca 180
tcagactggt agcccccaca accacaaagc tatgtctact ttcatcagaa ggagctccct 240
aagtggggaa gggttctccc tattttcccc ttccaggtgg gaaattcctg gccagggtcc 300
cctgtctc   308

<210> 124
<211> 774
<212> DNA
<213> Homo sapiens

<400> 124
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gttcccgaag gccctcggga aagttggtga atgcaaacag caggcagcca gagagcctgc 180
tgcagaggag accagagacg atgccccagg agggcacaga agtgtgcaaa agactcagca 240
gtgggaagga gcctggtccg tgagtgtgag gagataaccc gggccctagg cccttcctgc 300
cccaactttc caccacctgg cccagcccct tgcagcggtg aggcttagca tctctctgct 360
gggtttgtga gagcccagac tgccccagtg agggtacagg agtactctcc ccaggcagga 420
agggtgggcg gcctccctcc aggtacccaa gaggaaatgt tagcagctga aagccccaga 480
gcagagctgt tctcatgggg aaggaccctg tcttccccat catcctaggc gttcattgag 540
gatgaggact gtcttcctcc atcagaccga gagttcccaa gggcaagggc tgtctctccc 600
tggtcagaca gggagctccc cgaggcaga ggtcctgtct cctccatcag actggtagcc 660
cccacaacca caaagctatg tctactttca tcagaaggag ctccctaagt ggggaagggt 720
tctccctatt ttccccttcc aggtgggaaa ttcctggcca gggtcccctg tctc   774

<210> 125

<211> 271
<212> DNA
<213> Homo sapiens

<400> 125
aagtcgtacg catggttaaa aaaaaagaa aagaaaatcc aaaatagtac tgaaggtatg 60
cagtacacag gaagcctccg cccacctcca cctcccagct tccccctttg gaggtatctg 120
ctgtagtggg ctcctcaaga tacttctagc catgctctgt ttgtgcatgc ttatccctgc 180
acagacagca gaagctgtct tggccaacaa gaccaggaag cattggtatt tgcaggttaa 240
ttgaaaaatt catttaaggt ggagaaccat a   271

<210> 126
<211> 1950
<212> DNA
<213> Homo sapiens

<400> 126
atgatgccac aggatgagcg cacttcaaag ctggaaggaa gcctggtgag ggagcagggc 60
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gccagtcctt gcattggcat ctgcagattt gaagaagtag gcccctcttc tagtcttcat 180
ggactggatt tggcaagaaa agtccttcat cagtcagcca ttcagaaact ctgggaagcc 240
tatctggtaa cgtccatggg caggcaaaat ttgccattca gctacaagaa gtgcagttgg 300
cagacagcct tcaacttcag catcttcaga gtctgccttg actttcaagc tgaggccatg 360
gacttctcag gagctcctag ccaatggctg agaacaacgt gtctaacaca tgttctcttt 420
ctctttgatg gccaaggcat ggctggccaa tgggatgctt ctctctccaa aggagcaggg 480
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gaccaccagg aagtggactg caggcccctg gcctctccat tcagattctg caaagagatc 660
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agtacacagg aagcctccgc ccacctccac ctcccagctt ccccctttgg aggtatctgc 1800

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tgtagtgggc tcctcaagat acttctagcc atgctctgtt tgtgcatgct tatccctgca 1860
cagacagcag aagctgtctt ggccaacaag accaggaagc attggtattt gcaggttaat 1920
tgaaaaattc atttaaggtg gagaaccata                                  1950


<210> 127
<211> 209
<212> DNA
<213> Homo sapiens

<400> 127
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tttattattg agaatagtgc ttgttctctg agtactcctg acttagaaaa ggagcatagc 120
cctactaaag gggacttcaa agtagaaatc gtcaataacc ttttacttgc tacagttagt 180
ggcctcaaca tgatgttttt aaagatctt                                   209


<210> 128
<211> 496
<212> DNA
<213> Homo sapiens

<400> 128
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tgtattcagc tttcctgcct ctggctctct gtctttacc nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnttttatc acttttaaaa 420
ctaagaaaac aatgatcacc atacatgctc tgcttccaaa ctatactttc acatccaaag 480
taaccccaga ttcata                                                 496


<210> 129
<211> 252
<212> DNA
<213> Homo sapiens

<400> 129
catttctaac atttattgtc ctccagtaca aagaagtaac ccattgtcat gtctactcta 60
tgataggcta gaactatagg gttgctctat attgatcagg ttttttaaaga taaaaatgaa 120
aaaaaaatcc tatccagaca aaataaaatca gtgttttata tttttggagc atcagaactt 180
actttaagac ctcactggta attctttagc ctctcacatg tgataaagac attgtgctta 240
catttttttta aa                                                    252


<210> 130
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<211> 149
<212> DNA
<213> Homo sapiens

<400> 130
atcagaatcc tgggaagggt ttgttaaaac actactaggc agggtgaggt aacctaagag 60
cttttggagg cccaggtgag agggatcact tgcggccagc agagttcaag agcagcccag 120
gcaacacagg gagacctctt ctctacaaa   149

<210> 131
<211> 390
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (217)..(273)
<223> a, c, g or t

<400> 131
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cgggcccggg cgagctgcag gcctgaaacc cacccaccct cttagatgtg tctgtgggcc 120
atagaaatta ctagggttgt cttgggtgtg gcctcaacct gttcaacaac aggtgtgctg 180
tttccattct ggaaaccagt cctctgtctt ccagaannnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnntactagg cagggtgagg taacctaaga 300
gcttttggag gcccaggtga gagggatcac ttgaggccag cagagttcaa gagcagccca 360
ggcaacacag ggagacctct tctctacaaa   390

<210> 132
<211> 1079
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (874)
<223> a, c, g or t

<220>
<221> unsure
<222> (879)
<223> a, c, g or t

<220>
<221> unsure
<222> (885)

63

<223> a, c, g or t

<220>
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<222> (887)
<223> a, c, g or t

<220>
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<222> (890)
<223> a, c, g or t

<220>
<221> unsure
<222> (894)
<223> a, c, g or t

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<223> a, c, g or t

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<223> a, c, g or t

<220>
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<222> (921)
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<222> (924)
<223> a, c, g or t

<220>
<221> unsure
<222> (926)
<223> a, c, g or t

<220>
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<222> (931)
<223> a, c, g or t

<220>

<221> unsure
<222> (933)
<223> a, c, g or t

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<223> a, c, g or t

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<222> (950)
<223> a, c, g or t

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<223> a, c, g or t

<220>
<221> unsure
<222> (977)
<223> a, c, g or t

<220>
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<222> (988)
<223> a, c, g or t

<220>
<221> unsure
<222> (993)
<223> a, c, g or t

<220>
<221> unsure
<222> (995)
<223> a, c, g or t

<220>
<221> unsure
<222> (1007)
<223> a, c, g or t

<220>
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<222> (1013)
<223> a, c, g or t

<220>
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<222> (1030)
<223> a, c, g or t

<220>
<221> unsure
<222> (1037)
<223> a, c, g or t

<220>
<221> unsure
<222> (1050)
<223> a, c, g or t

<220>
<221> unsure
<222> (1061)
<223> a, c, g or t

<400> 132
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tctgcactcc aggctcagat atgcaactcc ctatttgaca ggtctgcttg aaaacttgct 180
gggcatccca gaggtaacat ggatctaatg gaaggtttga ttttgtcctc caagccagtt 240
cttcccttga ctttctacat ttcaccaaat gataccccaa ccactcactt attctagccc 300
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tcttgttctt ttttcttccc aaatatatct caagtccatg ctcttctgtc tgtccctact 420
gccactatcc aagctctgag gccatccatt acatggacaa ctataaacta catgtcctaa 480
tgacatatta gcagtagagt tgctaggtca aaagatttgt gtgtttatt ttgatagact 540
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tgtttctgta ctctgtcacc accactgaat atcagggtca ctcttagccc atagcctcgt 660
gagaattaga agtcacttcc tctgggtgag gcagctagct ccacagcaca gacttaacaa 720
gtggaacttt agcatgtatt taattcccac tcattctctt acctatgtgt ccttctgcag 780
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<210> 133
<211> 303
<212> DNA
<213> Homo sapiens

<220>

66

<221> unsure
<222> (295)
<223> a, c, g or t

<400> 133
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caaccaggga tttaaaaaat ggtttctggt gtccaggtaa gtttgcataa aaccaaaata 180
aaactgttta atactgggcc cactacatta atctatggtg ctaacacgtg ctgtgaaccg 240
tggggtcagg ggctggggga taaagttgca accattttt gggggttgg gggangagga 300
ggg 303

<210> 134
<211> 546
<212> DNA
<213> Homo sapiens

<400> 134
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gagatcacat ttgcaaattt acattgttta atatcatagc ctcaaaataa attgcatata 180
aattttaaaa cctatggaga aattgacaaa tccaccaaca ctgtgggaaa tttttaatac 240
atatctctta gctattaatg cataaagtag gtaaggaaaa ccaataggat gcaaataatt 300
tgaacaataa aatcaacaac tttgatttag ttgatataca tatacagaca cttgcattta 360
gtaattggaa aatatacatt attttccaac acacacaaaa aaacacttgc aaaaatgggc 420
tgtgtcttaa attttcaaa gaactgatat catacagaac acatgttatg accataatgt 480
agttacatta gaaaatgtgg cagggattct gattctcctt tctgtgctag ggcatacagt 540
taaatc 546

<210> 135
<211> 590
<212> DNA
<213> Homo sapiens

<400> 135
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acattgttta atatcatagc ctcaaaataa attgcatata aattttaaaa cctatggaga 180
aattgacaaa tccaccaaca ctgtgggaaa tttttaatac atatctctta gctattaatg 240
cataaagtag gtaaggaaaa ccaataggat gcaaataatt tgaacaataa aatcaacaac 300
tttgatttag ttgatataca tatacagaca cttgcattta gtaattggaa aatatacatt 360
attttccaac acacacaaaa aaacacttgc aaaaatgggc tgtgtcttaa attttcaaa 420
gaactgatat catacagaac acatgttatg accataatgt agttacatta gaaaatgtgg 480
cagggattct gattctcctt tctgtgctag ggcatacagt taaatcacat tttcaccttc 540
cttgtatttta tgagacttag ctctgtcctt atgaatgtgg cagaagtga 590

67

<210> 136
<211> 165
<212> DNA
<213> Homo sapiens

<400> 136
gctcgaggcc tggcatctga gttcttctgt tcaggagaaa cactttcagc aggccattga 60
gagggtcatc ggaggtgagc ctgggagccc ttagggaggg aggggtgttt gcagctctgg 120
gcctggcagg ctcacccct ggccccagtt tcaattctgc atgca 165

<210> 137
<211> 172
<212> DNA
<213> Homo sapiens

<400> 137
tagttacagt ccttaaatat atgtcttggg tgccctgtgg ctgtgatttt ttaagggaaa 60
ttaacttatt ttaaataaaa taaacttaat ttaaaataaa attttgttat ctaaagccaa 120
atagaaaaaa ttccacattt tttcttacag tgctcattca tcagaacctt tt 172

<210> 138
<211> 809
<212> DNA
<213> Homo sapiens

<400> 138
agtacgtaca gtatcaaaca gtctccctcc ttttctctgt gatttggtct ttctccttag 60
agaatgtcct ccctccaact ccaaaagaca tgcctctgtg gtatagttac agtccttaaa 120
tatatgtctt gggtgccctg tggctgtgat tttttaaggg aaattaactt attttaaata 180
aaataaactt aatttaaaat aaaattttgt tatctaaagc caaatagaaa aaattccaca 240
ttttttctta cagtgctcat tcatcagaac cttttttttt tcttcttatt ttttcttttt 300
ttggggagaa tgggtcctcc ctttggtgcg catcagggggg aataagaggt acaaacaggc 360
ggtgattata cgctcacttg ggagtttgga aactccgggg gcatcattgg gattcccatt 420
ttgtcctcaa gcctccggag tagctaggac atacgggttt tgcaccacaa ggccgggata 480
aatttcaaaa tttttctcac gagacaaagt ttgggattct tggccccagg attgggacgg 540
ggtatatcac aaaagaaact atttcagggg cgcttagaga ggctcaagtg acacctactt 600
atcaggggtt tccagtggag agaactgtac cctacccctta ctaccttta agtggtgcct 660
ctccctccac ctttaacctt tacacattac ggaactggcg ctatcatttt aaagtcaact 720
aacctggact ttggacttct ttaacacttc agctccggga tccaaactaa aatcttaggc 780
aaggcctaat ggacggtaga agtctacgc 809

<210> 139
<211> 294
<212> DNA

68

<213> Homo sapiens

<400> 139
gtctttttca ttcatagtaa ccctgcaaaa caaacatata gaacagagac attatggaga 60
cttgaggatt gattttatgt attgattatg tatgtaagtc ccgataacat ctctggttca 120
ggaaattgca agaaaaagat tgggaatcag aacagcagaa aggtattttt ggaagggtaa 180
tttactgatt tttcgtttta aattgttgac attgccttcg ccggtggaaa tgaattactt 240
atgtgaatct ggcaggaaca caatttttaa aattagaaaa ttagtcctcc ttat 294

<210> 140
<211> 1056
<212> DNA
<213> Homo sapiens

<400> 140
acctaaacac attttaatta tattttgctc attttttggag aacccattcc ctttgacatc 60
tattatgaac attctaaaac ttaaatttgt gaaaacaaaa ctctgggaga tagattgtaa 120
ttttattcca tgaggaaggt gttaaaccag ctttgcagtt tgaattttat tcttaaaggc 180
tctgcagttc ttacctggat gtcgaaatga ttttttaattt caactgctgt agacctcatc 240
ctgtgggaac tagaaataat gtccaactgc cgtccagtct ggcgacattc cagccgttcc 300
cccaccccac gataacggcc tgactcttcc tcaattcatg acagcccatt ctacacataa 360
cctttctcct ctggcaccgg tcctcccagc agagagggat cctgcccttc ccttcccact 420
ctccagcata cagaccagca ggaagccaca agagggaaaa acaaaagcct tctgtataag 480
gcctatgaaa ggaccatggg ccagcctcag aatctgctgc ccctacaaac cagtattcct 540
caaatgatag ttccacattt acttaataag gaggactaat tttctaattt taaaaattgt 600
gttcctgcca gattcacata agtaattcat ttccaccggc gaaggcaatg tcaacaattt 660
aaaacgaaaa atcagtaaat taccttcca aaaataccttt tctgctgttc tgattcccaa 720
tcttttttctt gcaatttcct gaaccagaga tgttatcggg acttacatac ataatcaata 780
cataaaatca atcctcaagt ctccataatg tctctgttct atatgtttgt tttgcagggt 840
tactatgaat gaaaaagaca atttcatgaa tgcagaaaat ctggggatcg tgtttgggcc 900
cactctgatg aggccccctg aggacagcac cctgaccacc ctgcatgata tgcggtacca 960
aaagctgatt gtgcagattt taatagaaaa cgaagacgtt ttattctaat ccatcaggga 1020
aatgagctga atggccccag caccatccaa gttgac 1056

<210> 141
<211> 968
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (319)
<223> a, c, g or t

<220>
<221> unsure

69

<222> (497)
<223> a, c, g or t

<400> 141

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acgagatgtc ccagtaacct aaaattatcc agtcggtctt cttactttac aactaagaaa 60
aataaggctt agaaagaggg attgccagaa actttggcag ctggattgcc tgtgcttgtt 120
cctctaagcc atacctaaat tctgcagtaa atacttaact ttttaatagg gaaattgctt 180
caagataact tgaccagtga tacggtaaaa taattagact attggactaa tggtttaaca 240
caagtggctt taaaaagtct gcttaaaaaa caattttat ttagaaaaaa tagaaaata 300
aaaacatctt caaaatttng gagcctgaag gggctgtttg tttcatatat ggataatctt 360
tgaaaaggca agtcctgtat gtatttttca tttgttgaaa gaagattggt tatcagtagg 420
cttgcaaaca taatttgctt ttaagttctt tcaaggtttt atgcaataaa acctattgat 480
ttggaacttt aaaaaanaaa acaacaaaaa aatactttca gggttttgta atttcaagtg 540
gttttttaag gggagcaata gtttgccatt taccaaaggc ttctccagat aatttcttaa 600
atgtttctac ttaaaaataa aagctattaa taataagctg tcatgggatc catttgaaga 660
cagggaaaat agaaaatttt tattgtaaag ggaagaactt atccttttaa ttttatggac 720
taacagagtc tgcaggtctt aactcatttc agcctgtcaa atgtgcaatt aaaaatgaat 780
tttctaattg tattcaaatg aggctctata gtgaatacag aatcactctt ctaagttttt 840
tcccagttaa tttgtttaaa agtgttgtac tctcttgcaa gaacgtttaa aagttaagtc 900
ttgtaactgt taacatctaa tgtattaata taagccattt gttttttacc attttttttaa 960
ggccgtat                                                       968
```


<210> 142
<211> 1466
<212> DNA
<213> Homo sapiens

<400> 142

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gaaaatttga gtatctttt gaaattttaa attgaaattt ggatagagat ggttatggag 60
agaaatcaaa caactggaat agctgtttga tatcacttaa aagtgataaa attttaagtt 120
gaatctggtc agtttgcaat ggcctatttg taagaaatat caagacttct tgagaaaaat 180
gaaaagtgaa tacataaatg cttaaaatct ggtacttctg agttaaggtt ttgctctttg 240
agcttaatcc aatttgggat gatttttcat cctaggcttt tttgttttcc ttttttattt 300
ttatttttc tttttttagg ggaaggggac ttgctttctt ttccaaaaag gtgaatcctt 360
cttgtaggac ataggtaaaa aaaacaaagc tgaaatatat gttttgaata tagatagcta 420
attccctggg atataatatc ctttcaattt tttttttttt ttgggcccag tctgcctttg 480
gatgtttcaa aagtctgaac gagatgtccc agtaacctaa aattatccag tcggtcttct 540
tactttacaa ctaagaaaa taaggcttag aaagagggat tgccagaaac tttggcagct 600
ggattgcctg tgcttgttcc tctaagccat acctaaattc tgcagtaaat acttaacttt 660
ttaataggga aattgcttca agataacttg accagtgata cggtaaaata attagactat 720
tggactaatg gtttaacaca agtggcttta aaaagtctgc ttaaaaaaca attttatttt 780
agaaaaaata gaaaaataa aacatcttca aaatttagga gcctgaaggg ctgtttgtt 840
tcatatatgg ataatctttg aaaaggcaag tcctgtatgt atttttcatt tgttgaaaga 900
agattggtta tcagtaggct tgcaaacata atttgctttt aagttcttc aaggttttat 960
gcaataaaac ctattgattt ggaactttaa aaaaaaaaac aacaaaaaa tactttcagg 1020
gttttgtaat ttcaagtggt tttttaaggg gagcaatagt ttgccattta ccaaaggctt 1080
ctccagataa tttcttaaat gtttctactt aaaaataaaa gctattaata ataagctgtc 1140
```
```

70
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```
atgggatcca tttgaagaca gggaaaatag aaaattttta ttgtaaaggg aagaacttat 1200
ccttttaatt ttatggacta acagagtctg caggtcttaa ctcatttcag cctgtcaaat 1260
gtgcaattaa aaatgaattt tctaattgta ttcaaatgag gctctatagt gaatacagaa 1320
tcactcttct aagttttttc ccagttaatt tgtttaaaag tgttgtactc tcttgcaaga 1380
acgtttaaaa gttaagtctt gtaactgtta acatctaatg tattaatata agccatttgt 1440
tttttaccat tttttttaagg ccgtat                                     1466
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<210> 143
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (289)
<223> a, c, g or t

<400> 143
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ctgttagctc accagggcag atcttgacct caaagaatgc cgtcttccct tctggagctg 120
gtcctgtgat gtgaacctgg ctatcttcaa ttcacaggat agggagtaag acatttcatt 180
ttggccttag gtccaagcca tcttcttcaa tgtagctact actagagagc ccacaatgaa 240
gccaataatt ggctccccat ttggcaattt gtgtcctttt cagaaagang aagggttagt 300
aatcac                                                            306
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<210> 144
<211> 494
<212> DNA
<213> Homo sapiens

<400> 144
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gacacagcct atctcaaaga gagatgagaa gagccaggcc ccctctcttc ttcctccatg 60
ctgttagctc accagggcag atcttgacct caaagaatgc cgtcttccct tctggagctg 120
gtcctgtgat gtgaacctgg ctatcttcaa ttcacaggat agggagtaag acatttcatt 180
ttggccttag gtccaagcca tcttcttcaa tgtagctact actagagagc ccacaatgaa 240
gccaataatt ggctccccat ttggcaattt gtgtcctttt tcagaaagag gaagggttag 300
taatcagcac ttttaagtac cagcatgcag cattaacaag ttctcaaggc ctgcaagcca 360
tagggtttct gtcttccctg tattggcctt gtaatctctg accatgatta gggtaagagt 420
taagagactc ccaggacagg aaacggaaaa catcagattg tgtatggaat gaaccctctt 480
ggctggatgt ggtg                                                   494
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<210> 145
<211> 174
<212> DNA
<213> Homo sapiens

71

<400> 145

gtggaacaac tctatgccat aaaatttctt atttcacagt taaatgaaca tatttgtgtt 60
atgtcacttt cttttagctt gcattccttt tataggaagg ccattttagg agtcctgggg 120
cattttgact caacttctta aatcatttat tctattcaca aaaggtttat tgaa   174

<210> 146
<211> 445
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (371)
<223> a, c, g or t

<220>
<221> unsure
<222> (391)
<223> a, c, g or t

<220>
<221> unsure
<222> (406)
<223> a, c, g or t

<220>
<221> unsure
<222> (427)
<223> a, c, g or t

<400> 146

tgattttaa caattgtgtg tgtgcaccca gctaaccatc tctacaatcg atctagaaca 60
ttttcatcac ttcagtgctt ctcgtatatt ccttcccagc taacccatga tccccaaccc 120
tggccatagg aacccgctga tccatcttct atcactttag attgaatttg tctttcctac 180
tgttttatat aaagaaatta cctcctttaa gtcctatcaa attcctgatc acccttaaaa 240
aacaattttt aggtattacc ataaaacctt ccatgacatt ctctgcttta tcttctctgt 300
gctactttgt ccattcattg ttgcattgta atgtatttct gtacatgtta tatcactaaa 360
ctgtctcctc nttgaaggga gggacatgtg ntcatcatct atttcnaagg cttatacaga 420
aactganaca tagtagatgc ttact   445

<210> 147
<211> 734
<212> DNA
<213> Homo sapiens

72

<400> 147
tgatttttaa caattgtgtg tgtgcaccca gctaaccatc tctacaatcg atctagaaca 60
ttttcatcac ttcagtgctt ctcgtatatt ccttcccagc taacccatga tccccaaccc 120
tggccatagg aacccgctga tccatcttct atcactttag attgaatttg tctttcctac 180
tgttttatat aaagaaatta cctcctttaa gtcctatcaa attcctgatc acccttaaaa 240
aacaatttt aggtattacc ataaaacctt ccatgacatt ctctgcttta tcttctctgt 300
gctactttgt ccattcattg ttgcattgta atgtatttct gtacatgtta tatcactaaa 360
ctgtctcctc cttgaaggga gggacatgtg ttcactcatc tattttcaag gcttattaca 420
gaaactgaaa catagtagat gcttacttgg gaatattata tctcaaaata gaaaacacc 480
cagcaaatcg catcttatat tagtctttag aattagtatc aaagcctaat tattatgaca 540
cttgaaacat taaataactt agaaaacaaa gacttaaaag ttttatgata aagccagaaa 600
cttttatac tgaccatttt taaatactga catttcagat taattggggg cagatgatat 660
atgaaattat agtttatact gtgacttctt aatacttcag ttgtgttaga taaactgata 720
gttcgtcaca tttt 734

<210> 148
<211> 29
<212> PRT
<213> Homo sapiens

<400> 148
Met Leu Lys Ile Ile Asp Lys Leu Tyr Phe Ser Tyr Leu His Ser Ala
1   5   10   15

Asp Ile Leu Cys Asn Thr Glu Ser Tyr Thr Leu Ser Met
            20   25

<210> 149
<211> 87
<212> PRT
<213> Homo sapiens

<400> 149
Met Gly Trp His Glu Ile Gln Ile Pro Val Leu Ile Phe Leu Leu Ala
1   5   10   15

Val Tyr His Arg Thr Ser His Phe Thr Ser Leu Pro Leu Gly Pro Gln
                20   25   30

Phe Ser Val Phe Leu Ile Tyr Lys Tyr Ser His Pro Ala Phe Arg Gln
            35   40   45

Val Leu Arg Leu Asn Lys Glu Phe Asn Leu Leu Trp Leu His Ile Lys
        50   55   60

His Ile Leu Val Ser Val Cys Leu Val Ile Ser Asn Ala Asn Ile Leu

73

Ser Ala Pro Cys Pro Glu Cys
               85

<210> 150
<211> 45
<212> PRT
<213> Homo sapiens

<400> 150
Ser Ser Val Ala Leu Ala Leu Gly Ala Leu Thr Val Trp His Ala Val
 1   5   10   15

Leu Ile Ser Arg Gly Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys
         20   25   30

Glu Arg Arg Arg Leu Gln Ala Lys Gly Arg Val Ser Arg
       35   40   45

<210> 151
<211> 152
<212> PRT
<213> Homo sapiens

<400> 151
Met Val Pro Glu Val Leu Ile Leu Cys His Gly Leu Ala Val Trp Lys
 1   5   10   15

Trp Phe Pro Gly Leu Ala Val Leu Arg Ile Pro Gly Cys Val Thr Gly
         20   25   30

Asn Lys Pro Phe Asn Leu Pro Gly Thr Val Phe Phe Cys Lys Met Arg
         35   40   45

Gly Leu Gly Ala Ser Phe Leu Arg Pro Trp Gly Leu Val Ala Glu Phe
       50   55   60

Ile Ser Pro Thr Pro Cys Pro Ser Ser Tyr Gly Ser Thr His Lys Ala
 65   70   75   80

Phe His Ser His Lys Glu Lys Ala His Lys Val Pro Gln Pro Pro His
         85   90   95

Thr Gln Glu Pro His Leu His Pro Ser Leu Lys Ala Arg Leu Pro Leu
        100   105   110

Pro Gln His Thr Gln Val Leu Leu Gly Leu Pro Ala Leu Phe Ser Ser
        115   120   125

Ser Pro Glu Trp Asn Gly Pro Ala Met Ala Ser Gln Arg Thr Ala Ser
        130   135   140

Trp Gln Ser Trp Glu Trp Val Glu
145   150

<210> 152
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (14)

<220>
<221> UNSURE
<222> (21)

<400> 152
Met Gly Leu Arg Val Leu Leu Leu Leu Gly Leu Ser Leu Xaa Met Ser
  1   5   10   15

Gln Lys Pro Leu Xaa Gln Arg Pro Thr Ala Leu Gly Pro
            20   25

<210> 153
<211> 46
<212> PRT
<213> Homo sapiens

<400> 153
Met Phe Leu Val Glu His Lys Val Cys Ser Gly Asn Thr Gln Val Ser
  1   5   10   15

Ile Lys Cys Leu Pro Val Val Ser Glu Lys Phe Val Met Lys Tyr Phe
            20   25   30

Gly Asn Arg Cys Ile Val Ser Val Gly Gly Ala Asp Glu Phe
            35   40   45

75

<210> 154
<211> 34
<212> PRT
<213> Homo sapiens

<400> 154
Met Thr His Ser Glu Leu Leu Leu Val Ile Thr Ile Asn His Lys Met
1   5   10   15

Pro Gln Gly Pro Arg Val Thr Asn Trp Glu Pro Pro Pro Leu Thr Arg
            20   25   30

Ile Thr

<210> 155
<211> 99
<212> PRT
<213> Homo sapiens

<400> 155
Met Asp Ser Phe Leu Leu Leu Arg Gln Arg Glu Gly Gly Lys Arg Asn
1   5   10   15

Phe Lys Arg Asn Leu Gln Thr Cys Cys Ala Val Gly Pro Thr Gly Ile
            20   25   30

His Gly Gly Glu Thr Asn Ser Ile Met Leu Leu Gln Ile Leu Leu Lys
            35   40   45

Lys Gly Phe Asn Cys Leu Thr Lys Tyr Ser Ser Phe Phe His Leu Leu
    50   55   60

Thr Leu Gln Pro Asn Gln Val Pro His Thr Thr Gly Arg Cys Arg Glu
65   70   75   80

Ile Pro Gln Pro Glu Lys Ile Ile His Ala Gly Gln Arg Gln Lys Phe
                85   90   95

Thr Pro Gly

<210> 156
<211> 55
<212> PRT
<213> Homo sapiens

76

<400> 156
Met Gln Phe Leu Leu Cys Leu Ser Leu Leu Asp Phe Phe Ser Ser Thr
1   5   10   15

Tyr Lys His Ala Val Met Ser Pro Asn Gln Lys Lys Cys Lys Asn Pro
            20   25   30

Phe Ser Pro Met Leu Thr His His Pro Ala Val Val Leu Phe Leu Pro
            35   40   45

Phe Thr Leu Leu Tyr Tyr Ser
        50   55

<210> 157
<211> 59
<212> PRT
<213> Homo sapiens

<400> 157
Met Leu Gln Val Asp Val Cys Thr Leu Met Val Arg Thr Trp Ser Ser
1   5   10   15

Trp Pro Cys Trp Val Phe Ala Lys Glu Thr Val Leu Cys Ser Trp Gly
            20   25   30

Arg Phe His His Leu Ile Arg Ala Val Val Pro Thr Trp Cys Ser Leu
            35   40   45

Asp His Leu Tyr Lys Met Phe Ile Gly Gln Gly
        50   55

<210> 158
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (41)

<220>
<221> UNSURE
<222> (57)

<400> 158

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Met Thr Lys Arg Met Glu Lys Cys Leu Asn Ile Tyr Lys Arg Leu Asp
 1               5                   10                  15

Val Tyr Arg Gln Ile Val Ser Lys Gly His Arg Ile Val Arg Asn Ser
            20                  25                  30

Val Ile Leu Phe Cys Val Ile Asn Xaa Pro Phe Leu Tyr Pro Phe Thr
            35                  40                  45

Leu Ile Ile Asp Ile His His Phe Xaa Val Ile Ile Gln Leu
    50                  55                  60


<210> 159
<211> 47
<212> PRT
<213> Homo sapiens

<400> 159
His Leu Asn Arg Phe Ala Asn Ser Val Lys Val Phe Thr Arg Arg His
 1               5                   10                  15

Ala Phe Val Lys Lys Phe Phe Arg Gly Ser Ala Cys Asn Cys Ala Glu
            20                  25                  30

Ser Ala Leu Leu Ser Ser Gln Leu Ala His Cys Val Gly Arg Trp
            35                  40                  45


<210> 160
<211> 43
<212> PRT
<213> Homo sapiens

<400> 160
Met Gln Glu Ala Glu Gly Arg Leu Asn Lys Pro Gln Gly Gly Arg Val
 1               5                   10                  15

Gly Ala Glu Arg Val Gly Asn Ile Phe Phe Leu Leu Leu Asn Ser Arg
            20                  25                  30

Lys Ala Lys Thr Gln Ser Lys Leu Phe Leu Ser
            35                  40


<210> 161
<211> 62
<212> PRT
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<213> Homo sapiens

<400> 161
Met Phe Gly Ile Leu Glu Lys Ser Ser Lys Tyr Val His Leu Glu Gly
1   5   10   15

Ser Leu Lys His Pro Val Ile Lys Leu Val Ser Ile Ser Val Val Lys
            20   25   30

Asp Glu Tyr Ser Leu Ile Asn Lys Arg Asn Lys Tyr Leu Asn Ser Leu
            35   40   45

Thr Ser Ile Leu Asn Arg Phe Cys Gly Gln Met Arg Leu Pro
        50   55   60

<210> 162
<211> 78
<212> PRT
<213> Homo sapiens

<400> 162
Met Thr Pro Ala Leu Ala Ala Trp His Val Leu Ile His Pro Asn Val
1   5   10   15

Cys Phe Leu Ala Pro Ala Asp Ser Leu Glu Gly Ser Ile Lys Glu Asp
            20   25   30

Trp Val Asn Met Asp Leu Glu Asn Ala His Leu Gln Arg Glu Asn Gly
            35   40   45

Gly Trp Ala Ala Phe Pro Ser Pro Ala Pro Val Pro Gly Ile Trp Pro
        50   55   60

Arg Ser Ala Ser Val Cys Phe Gly Ala Lys Leu Gln Ala Pro
65   70   75

<210> 163
<211> 51
<212> PRT
<213> Homo sapiens

<400> 163
Met Ser Ser Trp Ile Pro Phe Ile Ile Thr Pro Leu Phe Ser Gly Ile
1   5   10   15

Arg Leu Glu Ala Trp Cys Gln Phe Tyr Ser Ser Leu Tyr Pro Phe Ile

79

His Phe Leu Ser Ile Leu Phe Pro Lys Tyr Phe Phe Ser Ala Pro Ser
         35   40   45

Pro Ala Ala
      50

<210> 164
<211> 27
<212> PRT
<213> Homo sapiens

<400> 164
Met Gly Ile Ile Pro Lys Cys Met Phe Leu Leu Gln Ser Arg Leu Met
  1   5   10   15

Gly Val Ile Thr Asn Thr Ser Leu Leu Leu His
              20   25

<210> 165
<211> 52
<212> PRT
<213> Homo sapiens

<400> 165
Met Lys Val Leu Lys Tyr His Asn Glu Ala Cys Gly Phe Tyr Ser Val
  1   5   10   15

Val Trp Met Leu Ser Ser Ser Ile Pro Trp Met Pro Thr Gly Met His
              20   25   30

Cys Leu Ile Leu Glu Phe Lys Arg Trp Pro Gln Thr Val Arg Leu Ser
         35   40   45

Met Trp Pro His
      50

<210> 166
<211> 47
<212> PRT
<213> Homo sapiens

<400> 166
Met Gly Arg Lys Ser Thr Asn Lys Thr Ala Cys Thr His Ile Asn Thr

```
                1                5                        10                       15

         Tyr Val Ser Thr Asn Asp Lys Leu Tyr Leu Tyr Arg Ala Trp Glu Gly
                     20                    25                    30

         Ser Tyr Ile Thr Leu His Val Ser His Pro Pro His Thr Ser Arg
                  35                    40                    45


<210> 167
<211> 42
<212> PRT
<213> Homo sapiens


<400> 167
Met Cys Trp Gly Tyr Phe Ser Ile Ser Lys Lys Phe Pro Asn Leu Thr
     1                5                        10                       15

Ser Val Leu Met Asn Leu Gly Thr Asp Leu Ala Val Arg Pro Thr Ser
                  20                    25                    30

Ile Phe Pro Thr Asp Ser Ile Leu Leu Glu
             35                    40


<210> 168
<211> 55
<212> PRT
<213> Homo sapiens


<400> 168
Met Asn Lys Ile Lys Gly Lys Ser Val Leu Phe Tyr Met Pro Glu Thr
     1                5                        10                       15

Ser Arg Ile Phe Arg Lys Val Gln Phe Lys Glu Asn Gln Ala Ala Leu
                  20                    25                    30

Asp Ser Thr Asn Lys Asn Val Ser Leu Ser Glu Glu Leu Val Asn Gln
             35                    40                    45

Gly Thr Gln Ser Ala Phe Ser
          50                    55


<210> 169
<211> 24
<212> PRT
<213> Homo sapiens
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81

<400> 169
Met Met His Met Gln Leu Ile Ser Glu Phe Ser Cys Leu Cys Cys Phe
1   5   10   15

Phe Phe Leu Gly Ile Tyr Ile Lys
            20

<210> 170
<211> 68
<212> PRT
<213> Homo sapiens

<400> 170
Met Ile His Leu Ser Glu Val Ser Gly His Leu Lys Glu Arg Lys Gly
1   5   10   15

Lys Ala Ser Cys Gln Lys Gln Lys His Val Leu Tyr Lys Arg Phe Lys
            20   25   30

Asn Gln Asn Gly Ile Arg Leu Ser Asn Cys Lys Arg Gln Ser Ser Ala
            35   40   45

Phe Lys Ile Leu Arg Lys Asn Asn Val Tyr Ile Lys Ile Phe Ile Ile
        50   55   60

Ile Phe Asn Phe
    65

<210> 171
<211> 100
<212> PRT
<213> Homo sapiens

<400> 171
Ser Phe Ala Phe Phe Phe Ser Leu Arg Gln Ser Leu Thr Leu Ser Pro
1   5   10   15

Arg Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Asn Leu Cys Leu
            20   25   30

Leu Gly Ser Ser Asn Ser Ser Ala Ser Ala Ser Gln Val Ala Gly Ile
            35   40   45

Thr Gly Thr His His His Ala Gln Val Ile Phe Ile Phe Phe Ile Glu
    50   55   60

82

Met Gly Phe Arg His Ile Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser
65   70   75   80

Gly Asp Pro Pro Ala Ser Ala Ser Glu Ser Ala Gly Ile Thr Gly Val
                85   90   95

Arg His His Thr
            100

<210> 172
<211> 58
<212> PRT
<213> Homo sapiens

<400> 172
Met Glu Cys Leu Ser Ile Asn Leu Thr Lys Asn Val Ser Tyr Leu Tyr
1   5   10   15

Thr Gly Pro Leu Asn Thr Ser Glu Thr Lys Leu Lys Ser Tyr Leu Ile
            20   25   30

Gly Asn Gln Phe Pro Pro Arg Phe Ile Tyr Arg Val Ser Glu Ile Pro
        35   40   45

Ile Lys Ile Ser Ala Arg Ser Leu Arg Asn
        50   55

<210> 173
<211> 47
<212> PRT
<213> Homo sapiens

<400> 173
Met Asp Lys Glu Glu Ser Ala Val Leu Val Gly Gly Ser Ile Leu Pro
1   5   10   15

Asp Lys Leu Phe Leu Val Gly Phe Thr Asp Thr Ser Pro Asp Leu Leu
            20   25   30

Pro Ala Ala Thr Val Cys Phe Tyr Asp Ala Cys His His Asp Ile
        35   40   45

<210> 174
<211> 106

83

<212> PRT
<213> Homo sapiens

<400> 174
Met Thr His Val Gln Leu His Ala Leu Asp Leu Leu Leu Lys Asp Glu
 1   5   10   15

His Lys Ser Glu Ile Ser Thr Pro Trp Gln Pro Tyr Tyr Gln Leu Leu
             20   25   30

Ile Cys Ser Pro His Val Ser Thr Pro Phe Leu Ala Thr Ser Phe Cys
         35   40   45

Pro Ser His Ile Asn Thr Cys Gly Gln Trp Leu Thr Met Leu Lys Leu
         50   55   60

Lys Leu Tyr Pro Asp Glu Ile Leu Lys Arg Asn His Leu Cys Ser Ser
 65   70   75   80

Val Leu Thr Gln Glu Ser Gln His Val Phe Leu Phe Gln Glu Thr Ile
             85   90   95

Ile Ile Cys Thr Asn Ile Tyr Pro Asp Asn
             100   105

<210> 175
<211> 35
<212> PRT
<213> Homo sapiens

<400> 175
Met Ser Met Leu Arg Lys Gly Leu Lys Ser Phe Phe Ser Val Cys Val
 1   5   10   15

Leu Pro Ser Glu Pro Asn Ile Gly Ile Ser Ala Ser Lys Ile Pro Gln
             20   25   30

Gly Gln Glu
         35

<210> 176
<211> 54
<212> PRT
<213> Homo sapiens

<400> 176

84

Met Ser Ser Ser Pro Leu Val Ser Ala Lys Phe Ser Phe Leu Phe His
 1   5   10   15

Glu Gly Arg Ala Pro Ser Leu Phe His Pro Leu Met Thr Ser Gln Pro
                20   25   30

Leu Glu Phe Cys Leu Met Met Asp Phe Ser Glu Ile Cys Leu Cys Asn
            35   40   45

Glu Asp Lys Asp Ser Gly
        50

<210> 177
<211> 20
<212> PRT
<213> Homo sapiens

<400> 177
Met Arg Pro Leu Lys Met Ile Arg Thr Ala Lys Lys Leu Phe Val Tyr
 1   5   10   15

Leu Gly Ser Tyr
                20

<210> 178
<211> 66
<212> PRT
<213> Homo sapiens

<400> 178
Met Met Tyr Tyr Pro Asp Asp Leu Trp Asn Leu Leu Arg Asn Arg Asp
 1   5   10   15

Cys Val Ala Phe Leu Ile Met Gly Thr Gly Pro Ser Leu Leu Arg Leu
                20   25   30

Pro Met Cys Val Gly Thr Glu Leu Leu Trp His Ser Ser Ser Arg Leu
            35   40   45

Met Glu Leu Ser Ser Ser Glu Ala Ser Trp Val Val His Ala Asn Leu
        50   55   60

Val Leu
 65

<210> 179
<211> 70
<212> PRT
<213> Homo sapiens

<400> 179
Met Cys Val Ile Tyr Gln Arg Gly Ile Cys Asp Glu Lys Lys Asn Leu
1   5   10   15

Lys Cys Pro Gln Met Phe Gln Leu Ser Glu Thr Glu Lys Thr Leu Thr
            20   25   30

Ser Val Phe Arg Ile Ile Val Ser Asn Ile Leu Lys Ile Asp Val Ser
            35   40   45

Ser Val Met Ile Phe Leu Arg Leu His Gln Arg Thr Ser Leu Asn Leu
        50   55   60

Ser Val Ile Gln Asn Gln
65   70

<210> 180
<211> 30
<212> PRT
<213> Homo sapiens

<400> 180
Met Asn Pro Val Cys Trp Val Gly Phe Gly Glu Val Asn Ile Glu His
1   5   10   15

Met Glu Phe Lys Tyr Ile Glu Met Asp Thr Val Ile Glu Met
            20   25   30

<210> 181
<211> 55
<212> PRT
<213> Homo sapiens

<400> 181
Met His Ala Cys Gly Ser Leu Arg Leu Asp Lys Asp Pro Thr Thr Leu
1   5   10   15

Leu Cys Val Asn Thr Arg Cys Thr Arg Ser His Leu Pro Gly Ala Gly
            20   25   30

Gly Trp Trp Arg Lys Val Lys Ser Gln Gln Thr Val His Arg Thr Tyr

35   40   45

Ser Ala Thr Gly Lys Lys Ser
        50   55

<210> 182
<211> 16
<212> PRT
<213> Homo sapiens

<400> 182
Met Pro Ala Leu Arg Glu Ala Phe Pro Gln Ala Pro Leu Ala Leu Ala
  1   5   10   15

<210> 183
<211> 48
<212> PRT
<213> Homo sapiens

<400> 183
Met Thr Phe Gln Lys Leu Met Ile Leu His Ile His Asp Gln Met Phe
  1   5   10   15

Ser Leu Met Glu Ala Ser Asp Val Cys Ser His Gln Ile Arg Phe Lys
                20   25   30

Met Ser Val Ser Ser Lys Ser Ser Lys Thr Ser Pro Ser His Gln Lys
            35   40   45

<210> 184
<211> 55
<212> PRT
<213> Homo sapiens

<400> 184
Met Ser Val Leu Lys Arg Phe Leu Lys Pro Ser Leu Ser Ile Ala Lys
  1   5   10   15

Thr Cys Tyr Val His Tyr Pro Pro Asn Ser Tyr Leu Lys Thr Thr Pro
                20   25   30

Lys Met Leu Tyr Phe Val Phe Lys Val Arg Glu Glu Asn Arg Gly Glu

                            87

Val Phe Leu Cys Ser Phe Pro
      50   55

<210> 185
<211> 14
<212> PRT
<213> Homo sapiens

<400> 185
Met Trp Leu Arg Asp Leu Asn Tyr Lys Ile Ala Arg Leu Asp
  1   5   10

<210> 186
<211> 42
<212> PRT
<213> Homo sapiens

<400> 186
Met Met Phe Phe Tyr Ile Phe Cys Ser Met Gly Leu Leu Ile Pro Phe
  1   5   10   15

Ser Thr Leu Lys Met Leu Leu Ile Val Phe Pro Leu Ser Leu Phe Pro
              20   25   30

Lys Arg Asn Leu Leu Ser Phe Leu Ser Leu
          35   40

<210> 187
<211> 100
<212> PRT
<213> Homo sapiens

<400> 187
Leu Phe Phe Phe Leu Arg Trp Ser Leu Ala Leu Val Thr Gln Ala Gly
  1   5   10   15

Val Gln Val Val Asp Ile Gly Ser Leu Gln Pro Leu Pro Pro Gly Phe
              20   25   30

Lys Gln Phe Ser Cys Pro Ser Leu Leu Ser Ser Trp Asp Tyr Arg His
          35   40   45

Gly Pro Pro Arg Pro Ala Asn Phe Phe Val Phe Leu Val Glu Met Gly

Phe His His Val Gly Gln Ala Gly Pro Glu Leu Leu Thr Ser Ser Asp
65   70   75   80

Pro Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His
                    85   90   95

Leu Thr Trp Pro
                100

<210> 188
<211> 106
<212> PRT
<213> Homo sapiens

<400> 188
Met Ser Cys Leu Trp Pro Ser Leu Asp Leu Pro Ser Leu Ser His Ser
   1   5   10   15

Lys Gln Ser Ser Ser Gln Ala Glu Gly Gln Val Thr Ser His Thr Arg
                    20   25   30

Gln Arg Phe Pro Asp Gly Ala His Leu His Pro Ser Leu Thr Leu Val
               35   40   45

Leu Ser Gln Asp Ala Pro Leu Arg Leu Ala Pro Pro Thr Leu Cys Leu
              50   55   60

Leu Cys Tyr Trp Ala Ser Leu Pro Ser Pro Arg Thr Pro Glu Leu Leu
  65   70   75   80

Asn Ala Gly Gln Lys Ser Ile Pro Asp Leu Gln Gln Arg His Phe Asp
                    85   90   95

Ile Lys Glu Met Ala Leu Asp Phe Cys Leu
                  100   105

<210> 189
<211> 46
<212> PRT
<213> Homo sapiens

<400> 189
Met Val Ile Ser Arg Ile Ser Ile Leu Arg Lys Met Thr Lys Phe His
  1   5   10   15

Lys Phe Cys Ser Gln Leu Thr Glu Pro Gly Arg Arg Thr Gln Pro Lys
            20   25   30

Glu Asn Pro Trp Ser Leu Tyr Asp Thr Asp Trp Leu Glu Lys
            35   40   45

<210> 190
<211> 46
<212> PRT
<213> Homo sapiens

<400> 190
Met Ser Arg Val Arg Ala Glu Lys Pro Gly Arg Val Ala Lys Leu Ala
  1   5   10   15

Ala Cys Arg Pro Leu Pro Arg Leu Gln Met Ser Gly Ser Ile Pro Leu
            20   25   30

His Lys Cys Lys Glu Lys Ala Ser Met Pro Pro Leu Trp Ser
            35   40   45

<210> 191
<211> 50
<212> PRT
<213> Homo sapiens

<400> 191
Met Arg Pro Ala Arg Leu Gly Pro Arg Cys Ser Asp Leu Asp Phe Gly
  1   5   10   15

Leu Val Leu Ser Ser Trp Leu Arg Leu Ala Arg Cys Pro Leu Glu Ser
            20   25   30

Ser Phe Gly Phe Ala Phe Phe Val Cys Leu Phe Ser Pro Asn Phe Cys
            35   40   45

Gln Thr
      50

<210> 192
<211> 76
<212> PRT
<213> Homo sapiens

90

<400> 192

Met Glu Gly Thr Val Gly Gln Ala Lys Met Val Glu Lys Trp Met Arg
1   5   10   15

Pro Thr Leu Leu Met Ser Leu Arg Gly Leu Gly Glu Arg Ser Asn Glu
            20   25   30

Pro His Val Ser Pro Glu Ser Ser Ala Ala Pro Lys Ala Gly Pro Ser
        35   40   45

Leu Glu Asp Cys Glu Arg Glu Asp Gly Ser Ile Arg Thr Gly Trp Asp
        50   55   60

Thr Ala Pro Thr Lys Glu Ser Pro Thr Ser Cys Ala
65   70   75

<210> 193
<211> 54
<212> PRT
<213> Homo sapiens

<400> 193

Arg Thr Val Cys Thr Lys Val Ser Cys Pro Val Gln Leu Pro Ala Asp
1   5   10   15

Trp Thr Cys Lys Val Gln Pro Val Trp Leu Glu Phe Pro Cys Leu Pro
            20   25   30

Ile Ser Cys Arg Leu Arg Val Ser Ser Asp Thr Ser Pro Asp Ser Ala
        35   40   45

Thr Trp Gly Ser Trp Lys
        50

<210> 194
<211> 27
<212> PRT
<213> Homo sapiens

<400> 194

Met Glu Pro Arg Ile Pro Val Lys Thr Phe Ser Phe Asp Lys Arg Ile
1   5   10   15

Leu Ile Arg Ile Leu Tyr Gln Ile Glu Gln Lys
            20   25

91

<210> 195
<211> 17
<212> PRT
<213> Homo sapiens

<400> 195
Met Leu Gln His Leu Arg Leu Thr Ile Trp Gly Glu Cys Val Trp Val
1   5   10   15

Phe

<210> 196
<211> 51
<212> PRT
<213> Homo sapiens

<400> 196
Met Arg Asn Val Ser Leu Ile Ser Cys Glu Asp Ala Asp Phe Thr Glu
1   5   10   15

Ala Leu Cys Asn Ile Trp Phe Val His Gln Thr Met Leu Ile Asp Cys
                20   25   30

Arg Ser His Leu Leu Pro Arg Trp Leu Thr Lys Thr Val Gly Ser Leu
            35   40   45

Leu Lys Pro
        50

<210> 197
<211> 62
<212> PRT
<213> Homo sapiens

<400> 197
Met Ser His Gly Gln Val Leu Gly Asp Val Ala Gly Lys Val Gly His
1   5   10   15

Ala Leu Gly Thr Glu Asp Gln Thr Phe Ala Val Glu Val Leu Lys Glu
                20   25   30

Thr Thr Pro Phe Phe Arg Ala Ser Ser Gly Pro Thr Gly Asp Pro Trp
            35   40   45

Cys Pro Asp His Lys Ile Gln Ser Lys Pro Val Ser Leu Ser
    50   55   60

<210> 198
<211> 400
<212> PRT
<213> Homo sapiens

<400> 198
Met Leu Leu Leu Val Thr Ser Leu Leu Leu Cys Glu Leu Pro His Pro
  1   5   10   15

Ala Phe Leu Leu Ile Pro Glu Lys Ser Asp Leu Arg Thr Val Ala Pro
        20   25   30

Ala Ser Ser Leu Asn Val Arg Phe Asp Ser Arg Thr Met Asn Leu Ser
        35   40   45

Trp Asp Cys Gln Glu Asn Thr Thr Phe Ser Lys Cys Phe Leu Thr Asp
    50   55   60

Lys Lys Asn Arg Val Val Glu Pro Arg Leu Ser Asn Asn Glu Cys Ser
65   70   75   80

Cys Thr Phe Arg Glu Ile Cys Leu His Glu Gly Val Thr Phe Glu Val
          85   90   95

His Val Asn Thr Ser Gln Arg Gly Phe Gln Gln Lys Leu Leu Tyr Pro
       100   105   110

Asn Ser Gly Arg Glu Gly Thr Ala Ala Gln Asn Phe Ser Cys Phe Ile
      115   120   125

Tyr Asn Ala Asp Leu Met Asn Cys Thr Trp Ala Arg Gly Pro Thr Ala
    130   135   140

Pro Arg Asp Val Gln Tyr Phe Leu Tyr Ile Arg Asn Ser Lys Arg Arg
145   150   155   160

Arg Glu Ile Arg Cys Pro Tyr Tyr Ile Gln Asp Ser Gly Thr His Val
       165   170   175

Gly Cys His Leu Asp Asn Leu Ser Gly Leu Thr Ser Arg Asn Tyr Phe
       180   185   190

Leu Val Asn Gly Thr Ser Arg Glu Ile Gly Ile Gln Phe Phe Asp Ser
      195   200   205

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Leu Leu Asp Thr Lys Lys Ile Glu Arg Phe Asn Pro Pro Ser Asn Val
    210             215             220

Thr Val Arg Cys Asn Thr Thr His Cys Leu Val Arg Trp Lys Gln Pro
225             230             235             240

Arg Thr Tyr Gln Lys Leu Ser Tyr Leu Asp Phe Gln Tyr Gln Leu Asp
            245             250             255

Val His Arg Lys Asn Thr Gln Pro Gly Thr Glu Asn Leu Leu Ile Asn
            260             265             270

Val Ser Gly Asp Leu Glu Asn Arg Tyr Asn Phe Pro Ser Ser Glu Pro
            275             280             285

Arg Ala Lys His Ser Val Lys Ile Arg Ala Ala Asp Val Arg Ile Leu
            290             295             300

Asn Trp Ser Ser Trp Ser Glu Ala Ile Glu Phe Gly Ser Asp Asp Gly
305             310             315             320

Asn Leu Gly Ser Val Tyr Ile Tyr Val Leu Leu Ile Val Gly Thr Leu
            325             330             335

Val Cys Gly Ile Val Leu Gly Phe Leu Phe Lys Arg Phe Leu Arg Ile
            340             345             350

Gln Arg Leu Phe Pro Pro Val Pro Gln Ile Lys Asp Lys Leu Asn Asp
            355             360             365

Asn His Glu Val Glu Asp Glu Ile Ile Trp Glu Glu Phe Thr Pro Glu
    370             375             380

Glu Gly Lys Gly Tyr Arg Glu Glu Val Leu Thr Val Lys Glu Ile Thr
385             390             395             400
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<210> 199
<211> 10
<212> PRT
<213> Homo sapiens

<400> 199
Met Asp Arg Met Glu Lys Arg Gln Thr Asp

94

<210> 200
<211> 20
<212> PRT
<213> Homo sapiens

<400> 200
Met Cys Tyr Ala Thr Leu His Gln Ile Asn Phe Leu Gln Thr Val Leu
1   5   10   15

Val Pro Gly Leu
            20

<210> 201
<211> 31
<212> PRT
<213> Homo sapiens

<400> 201
Met Cys Leu Cys Cys Trp Leu Tyr Trp Glu Glu Tyr Gly Pro Leu Ser
1   5   10   15

Leu Thr Gln Glu Phe His Val Phe Cys Gln Asp Thr Leu His Gly
            20   25   30

<210> 202
<211> 54
<212> PRT
<213> Homo sapiens

<400> 202
Met Asn His Ser Leu Ser Ala Phe Gln Arg Ala Leu Gln Val Leu Ile
1   5   10   15

Phe Lys Met Ser Val Tyr Ala Ser Gly Pro Arg Leu Glu Lys Lys Val
                20   25   30

Gly Asn Lys Leu Glu Gly Gly Arg Lys Gln Glu Arg Asn Val Thr Tyr
            35   40   45

Met Ala Asp Glu Gly Phe
        50

<210> 203
<211> 35
<212> PRT
<213> Homo sapiens

<400> 203
Met Ile Lys Ala Tyr His Pro Tyr Phe Glu Asn Phe Asn His Arg Ala
1   5   10   15

Gln Tyr Val Ser Asn Lys Leu Lys Lys Tyr Ser Phe Gln Leu His Phe
            20   25   30

Asp Gly His
        35

<210> 204
<211> 76
<212> PRT
<213> Homo sapiens

<400> 204
Met Lys Met Val Asn Arg His Met Lys Trp Lys Ser Ser Ala Leu Ser
1   5   10   15

Asp Leu Val Cys Ile Ser Thr Glu Ile Gln Ala Gly Leu Thr Arg His
            20   25   30

Thr Ser His Asn Phe Gln Cys His Cys Thr Ile Ile Leu Thr Val Val
            35   40   45

Ser Phe Phe Gln Ser Thr Glu Lys Gln Ala Asp Lys Pro Arg His Leu
        50   55   60

Asn Val Thr Trp Leu Met Thr Leu Ile Ser Thr Leu
65   70   75

<210> 205
<211> 94
<212> PRT
<213> Homo sapiens

<400> 205
Met Glu Gly Gln Asp Ser Leu Arg Asp Val Gly Ala Leu Ser His Leu
1   5   10   15

Ala His Thr Asp Arg Ser Trp Leu Gly Arg Ala Gly Val Ser Ala Trp

Arg Pro Ser Ala Ala Gly Asp Pro Gly Phe His Glu Val Gly Gly Val
        35   40   45

His Ala Gly Thr Ser Gln Leu Ala Gly Pro Gly Gly His Pro Gly Gly
     50   55   60

Ala Gly Ala Trp Gly His Glu Phe Thr Lys Val Ala Gln Gly Gln Glu
 65   70   75   80

Glu Thr Val Val Ala Glu Gly Pro Leu Val Glu Ala Trp Ala
                85   90

<210> 206
<211> 53
<212> PRT
<213> Homo sapiens

<400> 206
Met Pro Gln Asp Gln Asp Pro Pro Arg Glu Glu His Ala Ala Leu Arg
 1   5   10   15

Val Leu Phe Pro Arg Val Pro Leu Ala Val Pro His Gln Leu Gly Gly
                20   25   30

Glu Leu Glu Arg Ala Asp Arg Arg Thr Gly Phe Ser Ala Cys Ala Asn
        35   40   45

Ile Leu Thr Cys Pro
        50

<210> 207
<211> 75
<212> PRT
<213> Homo sapiens

<400> 207
Trp Ser Thr Pro Pro Phe Asp Pro Arg Phe Pro Ser Gln Asn Gln Ile
 1   5   10   15

Arg Asn Cys Tyr Gln Asn Phe Leu Asp Tyr His Arg Cys Leu Lys Thr
                20   25   30

Arg Thr Arg Arg Gly Lys Ser Thr Gln Pro Cys Glu Tyr Tyr Ser Cys
        35   40   45

Val Tyr His Ser Leu Cys Pro Ile Ser Trp Val Glu Ser Trp Asn Glu
      50   55   60

Gln Ile Lys Asn Gly Ile Phe Ala Gly Lys Ile
65   70   75

<210> 208
<211> 44
<212> PRT
<213> Homo sapiens

<400> 208
Met Arg Val Leu Arg Lys Glu Ser Pro Ser Arg His Val Leu Lys Asn
 1   5   10   15

Met Cys Leu Ile Arg Asn Pro Arg Glu Gly Thr Ala Ala Asn Asn Glu
                  20   25   30

Met Glu Ser Ala Thr Gly Glu Glu Lys Gly Asn Arg
            35   40

<210> 209
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (80)
<223> a, c, g or t

<400> 209
Met His Arg Lys Lys Lys Leu Glu Ser Phe Leu Leu Leu Ile Pro Pro
 1   5   10   15

Pro Tyr Leu Pro Leu Thr Lys Met Trp Gly Glu Pro Arg Phe Glu Gly
                  20   25   30

Ser Thr Gly Pro Cys Pro Gln Asp Ser Met Glu Gln Pro Val Thr Lys
            35   40   45

Gln Gly Ile Ser Leu Lys Ser Cys Leu Pro Lys Lys Ile Lys Leu Pro
      50   55   60

Arg Leu Ala Leu His Pro Ser Pro Pro Arg Ser Phe Pro Leu Lys Xaa

Lys Lys Leu

<210> 210
<211> 40
<212> PRT
<213> Homo sapiens

<400> 210
Met Thr Arg Phe Ser Gln Ala Ser Ser Ser Lys Asp Lys Thr Pro Pro
 1   5   10   15

Leu Pro Ser Met Val Gln Ala Thr Val Leu Val Lys Lys Tyr Ile Phe
            20   25   30

Thr Lys Lys Lys Ser Tyr Val Leu
        35   40

<210> 211
<211> 87
<212> PRT
<213> Homo sapiens

<400> 211
Met Pro Arg Pro Thr Glu Gly Glu Gly Ser Thr Glu Asp Arg Asp Pro
 1   5   10   15

Ile Gly Ile Gln Ser Gln Thr Arg Ala Glu Pro Thr Val Glu Gln Leu
            20   25   30

Met Ser Gly Ala Lys Asp Thr Ser Trp Asn Pro Pro Asp Gly Ser Ser
            35   40   45

Asn Pro Lys Arg Ala Gly Leu Gln Val Gly Leu Asn Trp Arg Asp Pro
        50   55   60

Gln Glu Ser Gly Arg Arg Asn Thr Arg Ala Phe Leu Glu Glu Gly Thr
    65   70   75   80

Phe Ile Leu Asp Ser Asn Gln
                85

<210> 212

<211> 38
<212> PRT
<213> Homo sapiens

<400> 212
Met Met Pro Gly Pro Ala Ala Leu Ile Pro Pro Thr Ala Thr Ala Cys
 1   5   10   15

Leu Leu Val Val Ala Arg Gly Ser Ser Val Pro Lys Asp Ser Ser Leu
                20   25   30

Phe Cys Ile Thr Val His
            35

<210> 213
<211> 88
<212> PRT
<213> Homo sapiens

<400> 213
Met Ser Leu Leu Asp Ala Ser Ser Leu Lys Pro Tyr Asp Ser Phe Leu
 1   5   10   15

Leu Ala Val Leu Phe Leu Thr Arg Asp Asn Lys Gly Phe Ala Ser Gln
                20   25   30

Val Cys Met Ala Lys Lys Val Ser Thr Ser Val Asn Gly Ser Phe Leu
            35   40   45

Met Thr Ser Gln Gln Pro Leu Val Lys Asp Val Ile Glu Ile Val Gln
     50   55   60

Arg Leu Gly Ser Val Cys Phe Val Leu Leu Leu Lys Ser Phe His Gly
 65   70   75   80

Ser Lys Leu Phe Leu Ser Ile Val
                85

<210> 214
<211> 42
<212> PRT
<213> Homo sapiens

<400> 214
Met Val Ile Arg Glu Leu Leu Gly Gly Gln Lys Tyr Pro Asn Pro Val
 1   5   10   15

Gln Gly Arg Asp Pro Trp Thr Val Thr Val Leu Ser Ala Phe Gly Arg
          20   25   30

Glu Gly Asp Ser Glu Ala Gln Thr Arg Ile
          35   40

<210> 215
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (46)

<400> 215
Met Pro Asn Cys Ser Val Glu Leu Arg Gly Tyr Tyr Tyr Asn Phe Val
 1   5   10   15

His Tyr Tyr Lys Tyr Phe Ile Leu Val Val Tyr Ser Thr Ala Asp Ser
          20   25   30

Asn Gln Lys Thr Lys Ile Gln Lys Tyr Tyr Ile Leu Glu Xaa Ile Ile
          35   40   45

Met

<210> 216
<211> 37
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (6)

<220>
<221> UNSURE
<222> (8)

<400> 216
Met Glu Met Leu Glu Xaa Lys Xaa Thr Ile Ile Asp Ile Val Ser Leu
 1   5   10   15

Leu Ala Leu Ser Gly Asp Leu Thr Gln Leu Arg Lys Ser Leu Val Thr
            20   25   30

Leu Lys Ile Cys Arg
            35

<210> 217
<211> 72
<212> PRT
<213> Homo sapiens

<400> 217
Met Gly Ser Tyr Gly Leu Leu Phe Lys Phe Tyr Gly Ala Ile Phe Thr
  1   5   10   15

Ser Val Ala Gln Gly Trp Ser Val Leu His Leu Arg Lys Val Ser Leu
            20   25   30

Gly Lys Cys Pro Cys His Pro Ser His Ser Arg Gln Ala Ala Ser Ser
            35   40   45

Ala Phe Ser Ser Ser Ser Ser His Ala Trp Ser Ser Pro Phe Val Ile
            50   55   60

Phe Ser Ser Leu Thr Pro Ser Leu
 65   70

<210> 218
<211> 49
<212> PRT
<213> Homo sapiens

<400> 218
Met Gly Ser Phe Ser Pro Leu Thr Tyr His Leu Gly His Trp Asn Met
  1   5   10   15

Ala Ala Cys Gly Ser Val Cys Glu Gly Pro Gly Asp Gly Gln Gly Gly
            20   25   30

Ser Ala Leu Phe Cys Phe Tyr Gln His Cys Ser Met Asn Val Phe Leu
            35   40   45

Thr

<210> 219
<211> 34
<212> PRT
<213> Homo sapiens

<400> 219
Met Leu Thr Arg His His Pro Leu Asn Val Leu Leu His Arg Leu Cys
1   5   10   15

Leu Asn Trp Leu Glu Glu Asn Asn Tyr Pro Arg Asn Thr Asp Tyr Leu
            20   25   30

Ile Phe

<210> 220
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (17)

<400> 220
Met Leu Leu Leu Pro Ala Thr Phe Leu Pro Thr Ser His Ala Arg Pro
1   5   10   15

Xaa Gln Pro His Cys His Thr Thr Cys Leu Ile Thr Ser His Val Leu
            20   25   30

Thr His

<210> 221
<211> 111
<212> PRT
<213> Homo sapiens

<400> 221
Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu Gln
1   5   10   15

Leu Ile Asn Leu Gly Ser Thr Gln Cys Ser Leu Asp Ser Val Met Asp
            20   25   30

Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser Pro Ser Pro
        35   40   45

Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser Gln Gly Arg Pro
        50   55   60

Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly Cys Ala Cys Gly Tyr
65   70   75   80

Gly Cys Gly Ser Trp Asp Val Gln Leu Glu Thr Thr Cys His Cys Gln
                85   90   95

Cys Ser Val Val Asp Trp Thr Thr Ala Arg Cys Cys His Leu Thr
                100   105   110

<210> 222
<211> 111
<212> PRT
<213> Homo sapiens

<400> 222
Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu Gln
    1   5   10   15

Leu Ile Asn Leu Gly Ser Thr Gln Cys Ser Leu Asp Ser Val Met Asp
                20   25   30

Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser Pro Ser Pro
        35   40   45

Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser Gln Gly Arg Pro
        50   55   60

Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly Cys Ala Cys Gly Tyr
65   70   75   80

Gly Cys Gly Ser Trp Asp Val Gln Leu Glu Thr Thr Cys His Cys Gln
                85   90   95

Cys Ser Val Val Asp Trp Thr Thr Ala Arg Cys Cys His Leu Thr
                100   105   110

<210> 223
<211> 83
<212> PRT
<213> Homo sapiens

<400> 223

Met Asn Val Glu Ala Arg Glu Gln Cys Asp Val Gln Leu Ser Asp Leu
1   5   10   15

Thr Trp His Leu Ile Trp Leu Glu Val Pro Pro Leu Leu Ser Val Pro
            20   25   30

Trp Leu Trp Ala His Gly Leu Ala Glu Pro Ser Tyr Gly Phe Arg Phe
        35   40   45

Thr Cys Tyr Asn Ile Gln Arg Gln Cys Thr Ser Leu Pro Arg Lys Leu
    50   55   60

Cys Ser Arg His Pro Phe Val Thr Leu Ile Ser Ile Met Asp Thr Thr
65   70   75   80

Thr Phe Tyr

<210> 224
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (3)

<220>
<221> UNSURE
<222> (11)

<220>
<221> UNSURE
<222> (14)

<400> 224

Met Asp Xaa Thr Arg Val His Asp Asp Glu Xaa Val Ile Xaa Gly Asp
1   5   10   15

Val Phe Val His Glu Val Thr Pro Gly Pro His Arg Trp Val Leu Val
            20   25   30

Arg Pro Phe Cys Leu Glu Val Arg Ala Val Phe Leu Arg Leu Trp Tyr
        35   40   45

105

Tyr Arg Gly Glu Lys Glu Glu Glu Leu Glu Val Arg Glu Arg Ser Cys
     50   55   60

Arg Leu Gly Arg Cys Asp Gln Gly Gln Arg Asp Gly Val Gln Glu Ala
 65   70   75   80

Cys Ser Ser Val Ser Cys Ser Leu Arg Gln Glu Val Ser Pro Ser Ser
              85   90   95

Gln Leu Asp Met Arg Ser Leu Leu Gly Val Pro Leu Ala Glu Val Glu
              100   105   110

Pro Val Ala Gln His Pro Pro Asn Glu Gly Arg Gly Arg His Leu Gly
              115   120   125

Gln Cys Leu Leu
     130

<210> 225
<211> 38
<212> PRT
<213> Homo sapiens

<400> 225
Met Ile Asn Asn Ser Asn His Asn Asn Ser Ser Ser Ser Lys Leu Arg
 1   5   10   15

Ala Ser Tyr Val Gln Ala Phe Ser Lys His Phe Thr Cys Ile Thr Pro
              20   25   30

Leu Val Ile Thr Thr Pro
              35

<210> 226
<211> 58
<212> PRT
<213> Homo sapiens

<400> 226
Met Ser Thr Phe Thr Val Leu Lys Asn Thr His Gln Leu Lys Lys Asn
 1   5   10   15

Thr Leu Phe Pro Phe Leu Gly His Leu Asn Leu Arg Glu Gln Leu Leu
              20   25   30

Tyr Lys Asn Asp Ile Lys Ile Ile His Phe Gly Ser Met Phe Leu Thr

Val Leu Arg Gly Cys Met Val Lys Leu Lys
        50   55

<210> 227
<211> 26
<212> PRT
<213> Homo sapiens

<400> 227
Met His Met His Ile Phe Leu Cys Leu Tyr Asn Leu Cys Asn Ile Cys
1   5   10   15

Glu Cys Asn Thr Phe Ser Phe Phe Leu Leu
            20   25

<210> 228
<211> 47
<212> PRT
<213> Homo sapiens

<400> 228
Met Leu Asp Val Met Arg Gln Val Ala Arg Ser Trp Leu Thr Ala Met
1   5   10   15

Glu Arg Leu Leu Leu Pro Ala Ala Val Arg Phe Ser Ala Ile Trp Leu
            20   25   30

Ala Gly Gln Phe Ala Met Ala Trp Leu Leu Gln Leu Ile Leu Gly
        35   40   45

<210> 229
<211> 53
<212> PRT
<213> Homo sapiens

<400> 229
Met Gly Asn Ile Gly Glu Thr Leu Ser Leu Lys Lys Lys Arg Arg Ala
1   5   10   15

Gly Gly Glu Ser Val Lys Asp Pro Gly Ser Thr Asp Thr Gly Gly Gln
            20   25   30

Arg Thr Arg Val Gly Val Ser Ser Asn Asp Ser Val Gly Ser Met Gly

107

Ala Val Gly Arg Glu
      50

<210> 230
<211> 80
<212> PRT
<213> Homo sapiens

<400> 230
Met Val Ile Asn Ser Cys Ile Ile Pro Leu Pro Ser Gln Ala Thr Ile
 1   5   10   15

Pro Glu Pro Trp Pro His Gly Ala Cys Ile Phe Arg Ile Gln Thr Pro
              20   25   30

Trp Gly Ser Ser Pro Leu Leu Pro Ser Leu Ser Ser His Pro Leu Thr
          35   40   45

His Leu Ser Cys Tyr Leu Ser Leu Glu Ile Pro Lys Met Met Cys Val
      50   55   60

Met Glu Arg Leu Glu His Gln Leu Gln Asn His Pro Val Thr Leu Ala
 65   70   75   80

<210> 231
<211> 40
<212> PRT
<213> Homo sapiens

<400> 231
Met Phe Gln Arg Phe Leu Ala Lys Val Thr Val Trp Met Val Val Pro
 1   5   10   15

Leu Thr Lys Thr Ala Met Asn Ala Lys Arg Ala Ser Phe Val Gly Arg
              20   25   30

His Lys Ile Ile Phe Arg Ile Cys
          35   40

<210> 232

<211> 24
<212> PRT
<213> Homo sapiens

<400> 232
Met Leu Leu Tyr Leu Ile Thr Arg Gly Asp Val Glu Asn Gly Cys Phe
1   5   10   15

Ile Phe Ser Val Val Phe Ala Leu
                20

<210> 233
<211> 26
<212> PRT
<213> Homo sapiens

<400> 233
Met Pro Pro Arg Gly Leu Pro His Phe Ser Pro His Pro Thr Arg Gln
1   5   10   15

Phe Leu Phe Leu Phe Pro Leu His Thr Lys
                20   25

<210> 234
<211> 37
<212> PRT
<213> Homo sapiens

<400> 234
Met Ser Tyr Glu Ile Leu Val Asn Thr Asp Phe Met Ser Pro Phe Leu
1   5   10   15

Arg Thr Leu Leu Val Cys Phe His Leu Tyr Ala Leu Ile Arg Ala Asn
                20   25   30

Asn Leu Lys Tyr Pro
            35

<210> 235
<211> 40
<212> PRT
<213> Homo sapiens

<400> 235
Met Gly Lys Gly Leu Arg Leu Gly Val Ser Ile Ile Leu Val Lys Ser

```
            1                5                    10                   15

        Phe Phe Thr Tyr Ser Ser Lys Asp Val Asn Tyr Phe Ser Ile His Ser
                     20                   25                   30

        Asn Ile Lys Ala Val Phe His Phe
                     35                   40



<210> 236
<211> 40
<212> PRT
<213> Homo sapiens

<400> 236
Met Glu Glu Thr Gly Pro Leu Pro Ser Gly Ser Ser Leu Ser Asp Gln
   1                5                    10                   15

Gly Glu Thr Ala Leu Ala Leu Gly Asn Ser Arg Ser Asp Gly Gly Arg
                 20                   25                   30

Gln Ser Ser Ser Ser Met Asn Ala
             35                   40



<210> 237
<211> 50
<212> PRT
<213> Homo sapiens

<400> 237
Met His Lys Gln Ser Met Ala Arg Ser Ile Leu Arg Ser Pro Leu Gln
   1                5                    10                   15

Gln Ile Pro Pro Lys Gly Glu Ala Gly Arg Trp Arg Trp Ala Glu Ala
                 20                   25                   30

Ser Cys Val Leu His Thr Phe Ser Thr Ile Leu Asp Phe Leu Phe Phe
             35                   40                   45

Phe Phe
     50



<210> 238
<211> 49
<212> PRT
<213> Homo sapiens
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<400> 238
Ser Ser Trp Gly Asp Ser Phe Ala Val Ser Ala Ala Trp Ala Arg Lys
  1   5   10   15

Gly Ile Glu Glu Trp Ile Gly Arg Gln Arg Cys Pro Gly Gly Val Ser
             20   25   30

Gly Pro Arg Gln Leu Arg Leu Ala Gly Thr Ile Gly Arg Ser Thr Arg
         35   40   45

Glu

<210> 239
<211> 54
<212> PRT
<213> Homo sapiens

<400> 239
Met Leu Arg Pro Leu Thr Val Ala Ser Lys Arg Leu Leu Thr Ile Ser
  1   5   10   15

Thr Leu Lys Ser Pro Leu Val Gly Leu Cys Ser Phe Ser Lys Ser Gly
             20   25   30

Val Leu Arg Glu Gln Ala Leu Phe Ser Ile Ile Asn Leu Ile Asn Thr
         35   40   45

Asp Trp Gln Lys Gln His
     50

<210> 240
<211> 23
<212> PRT
<213> Homo sapiens

<400> 240
Met Lys Lys Lys Ser Tyr Pro Asp Lys Ile Asn Gln Cys Phe Ile Phe
  1   5   10   15

Leu Glu His Gln Asn Leu Leu
             20

<210> 241

111

<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (6)..(7)

<220>
<221> UNSURE
<222> (9)

<220>
<221> UNSURE
<222> (13)

<220>
<221> UNSURE
<222> (23)

<220>
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<222> (27)..(31)

<220>
<221> UNSURE
<222> (38)..(40)

<220>
<221> UNSURE
<222> (43)

<220>
<221> UNSURE
<222> (45)

<220>
<221> UNSURE
<222> (47)

<400> 241
Met Val Lys Tyr Met Xaa Xaa Leu Xaa Leu Thr Pro Xaa Phe Ser Asn
 1   5   10   15

Leu Leu Gly Thr Leu Lys Xaa Arg Lys Val Xaa Xaa Xaa Xaa Xaa Pro
              20   25   30

Arg Lys Arg Asn Phe Xaa Xaa Xaa Pro Pro Xaa Leu Xaa Lys Xaa Arg

112

Cys His Phe Leu His Ile Asp Leu Gln Arg Val
        50   55

<210> 242
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (53)

<400> 242
Met Val Ser Gly Val Gln Val Ser Leu His Lys Thr Lys Ile Lys Leu
 1   5   10   15

Phe Asn Thr Gly Pro Thr Thr Leu Ile Tyr Gly Ala Asn Thr Cys Cys
            20   25   30

Glu Pro Trp Gly Gln Gly Leu Gly Asp Lys Val Ala Thr Ile Phe Trp
            35   40   45

Gly Val Gly Gly Xaa Gly Gly
        50   55

<210> 243
<211> 75
<212> PRT
<213> Homo sapiens

<400> 243
Met Val Ile Thr Cys Val Leu Tyr Asp Ile Ser Ser Leu Lys Asn Leu
 1   5   10   15

Arg His Ser Pro Phe Leu Gln Val Phe Phe Cys Val Cys Trp Lys Ile
            20   25   30

Met Tyr Ile Phe Gln Leu Leu Asn Ala Ser Val Cys Ile Cys Ile Ser
            35   40   45

Thr Lys Ser Lys Leu Leu Ile Leu Leu Phe Lys Leu Phe Ala Ser Tyr
        50   55   60

Trp Phe Ser Leu Pro Thr Leu Cys Ile Asn Ser

<210> 244
<211> 17
<212> PRT
<213> Homo sapiens

<400> 244
Met Ser Trp Val Pro Cys Gly Cys Asp Phe Leu Arg Glu Ile Asn Leu
 1   5   10   15

Phe

<210> 245
<211> 30
<212> PRT
<213> Homo sapiens

<400> 245
Met Tyr Val Ser Pro Asp Asn Ile Ser Gly Ser Gly Asn Cys Lys Lys
 1   5   10   15

Lys Ile Gly Asn Gln Asn Ser Arg Lys Val Phe Leu Glu Gly
            20   25   30

<210> 246
<211> 57
<212> PRT
<213> Homo sapiens

<400> 246
Arg Val Thr Met Asn Glu Lys Asp Asn Phe Met Asn Ala Glu Asn Leu
 1   5   10   15

Gly Ile Val Phe Gly Pro Thr Leu Met Arg Pro Pro Glu Asp Ser Thr
            20   25   30

Leu Thr Thr Leu His Asp Met Arg Tyr Gln Lys Leu Ile Val Gln Ile
            35   40   45

Leu Ile Glu Asn Glu Asp Val Leu Phe
        50   55

114

<210> 247
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (38)

<400> 247
Met Phe Ala Ser Leu Leu Ile Thr Asn Leu Leu Ser Thr Asn Glu Lys
  1   5   10   15

Tyr Ile Gln Asp Leu Pro Phe Gln Arg Leu Ser Ile Tyr Glu Thr Asn
              20   25   30

Ser Pro Phe Arg Leu Xaa Asn Phe Glu Asp Val Phe Ile Phe Leu Phe
          35   40   45

Phe Leu Asn Lys Asn Cys Phe Leu Ser Arg Leu Phe Lys Ala Thr Cys
          50   55   60

Val Lys Pro Leu Val Gln
65   70

<210> 248
<211> 36
<212> PRT
<213> Homo sapiens

<400> 248
Met Arg Arg Ala Arg Pro Pro Leu Phe Phe Leu His Ala Val Ser Ser
  1   5   10   15

Pro Gly Gln Ile Leu Thr Ser Lys Asn Ala Val Phe Pro Ser Gly Ala
              20   25   30

Gly Pro Val Met
          35

<210> 249
<211> 26
<212> PRT
<213> Homo sapiens

<400> 249

115

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Met Ser Leu Ser Phe Ser Leu His Ser Phe Tyr Arg Lys Ala Ile Leu
 1               5                   10                  15

Gly Val Leu Gly His Phe Asp Ser Thr Ser
            20                  25
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<210> 250
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (6)

<400> 250
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Met Ser Leu Pro Ser Xaa Arg Arg Gln Phe Ser Asp Ile Thr Cys Thr
 1               5                   10                  15

Glu Ile His Tyr Asn Ala Thr Met Asn Gly Gln Ser Ser Thr Glu Lys
            20                  25                  30

Ile Lys Gln Arg Met Ser Trp Lys Val Leu Trp
        35                  40
```